EDUCATION

A MONTHLY MAGAZINE
DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION

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PROFESSOR OF SCHOOL ADMINISTRATION, BOSTON UNIVERSITY

VOL. LIII JANUARY, 1933 No. 5

SECONDARY EDUCATION NUMBER

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Published by THE PALMER COMPANY
120 Boylston Street Boston, Massachusetts

Raymond P. Palmer, Business Manager

Published monthly except July and August. Subscription price $4.00 per year. 40 cents per copy.
Entered as second class matter at the Post Office, Boston, Mass., under the Act of March 3, 1879

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EDUCATION

Vol. LIII JANUARY, 1933 No. 5

CURRENT EVENTS A REQUIRED COURSE IN SECONDARY EDUCATION

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By a fortunate coincidence several of the articles in this special number have stressed the idea of adapting the curriculum to the needs of everyday life and training for intelligent participation in the duties of citizenship. This article calls attention to "the forgotten subject" or the "one whom nobody knew."

IT is rather surprising that as an outcome of the modern social philosophy of education, the study of current events has not been more definitely urged as a required subject in the secondary schools. It is partially implied in some of the recent social science curricula. To the average teacher, however, social science is just another abstract book subject to be perfunctorily learned, graded and recorded.

The course in social science in the high school is too apt to be a rehash of some textbook and notes on lectures which the teacher heard in college. The following are actual examination questions which were given to a 9th grade class in a required course in social science. Inquiry showed, as could easily be predicted, that the children hated the subject.

The examination, it will be seen, is of the Multiple Choice Type. The pupils were asked to underscore the answer which they believed correct.

1. Often the main reason people gather to live in one community is (1) sympathy, (2) better opportunity to make a living, (3) spirit of humanity.

2. The reason for our dependence on others economically is (1) specialization of labor, (2) inventions, (3) strikes, (4) custom.

3. Persecutions often defeat their own ends by (1) killing people, (2) driving people closer together, (3) causing hatred, (4) cause opposition.

4. As civilization has advanced many fears of outside dangers have changed to (1) hatred, (2) patriotism, (3) friendly rivalry, (4) persecution.

5. More knowledge makes us extend to unfortunate people more (1) toleration, (2) disgust, (3) of an idea that they should know better, (4) suffering.

6. In every line scientific investigation is producing more (1) feeling, (2) crime, (3) disagreements, (4) like-mindedness.

7. The idea of living so as to make conditions better for future generations is (1) selfishness, (2) pursuit of ideals, (3) toleration, (4) sympathy.

8. Society is held together safely by (1) force, (2) laws, (3) mutual confidence, (4) national crises.

9. In order to transact any business there must be (1) revolutions, (2) gov-

ernments, (3) social obligations, (4) mutual confidence.

10. The social force which ranks highest in making the world peaceful is (1) habit, (2) sympathy, (3) economic necessity, (4) imitation.

I have in mind a course in current events that would be begun in the first years of the junior high school, 7th grade, and continued every year until the close of the undergraduate college career. It would be required in every curriculum, course, school or college, —in the high school foreign language course, as well as in the English course; in the engineering college no less than in journalism and commerce. Just how many periods per week should be devoted to it I am not prepared to state dogmatically. Probably that would vary in the different stages of school life. Doubtless there should be daily meetings during the junior and senior high school years, possibly two or three per week in college.

The course should be exactly what the term implies, one in current events. It should seek first to inform the pupils of what is going on in the great world about them. In the second place it should stimulate an interest in what is transpiring day by day. In the third place, it should help them to interpret the great drama unfolded to their eyes. Why should the youth be led to think that only those personages and events shrouded in the mystery of the ages have any interest or significance? I once talked with a high grade Latin major in her senior year in college and discovered that she actually did not know that the nominating convention of one of the great political parties had just taken place. She could have reeled off the list of Roman emperors but was entirely innocent of the outstanding problems in the great nation in which she lived.

We are in the midst of the most dramatic events of all the ages and yet pupils must learn and pass examinations upon dead languages, the Peloponnesian wars, and the Draconian laws. In many schools there is no consideration of our presidential candidates in 1932. Every school child hears in the home something of the worst financial panic the world has ever known, but generally not one moment of school time is devoted to helping them to know the facts and to understand them so that the future citizens may avert a repetition. No, there is said to be no time in an overcrowded curriculum. They must learn the height of Mt. Popocatepetl, the location of Lake Titicaca, and the date of the Carthaginian wars. They must memorize *amo, amas, amat,* the while developing *hatred* for the classroom and the taskmaster.

This new course might well displace about half of the required English, especially that portion called composition. Instead of being required to say something they would have something to say. Most of the time spent on formal composition is largely fruitless. In the junior and senior high school most of the classics, like L'Allegro, Il Penseroso, Burke's speech on Conciliation, Pope's Essay on Man, Macauley's characterization of Addison and Johnson, the religious philosophy of Cotton Mather and Jonathan Edwards, and the rest should be displaced by current articles from the magazines and the daily press. These should all be utilized as they appear from day to day. The speeches of the presidential candidates, of outstanding congressmen,

and other notables in public life from home and foreign shores, should all be considered as they occur. The radio should be a part of standard equipment of every school building, so that when such notables as Lloyd George, Premier MacDonald, Mussolini, Madame Schumann Heink, Jane Addams, Mary Woolley, George Bernard Shaw, Einstein, or Millikin, are on the air, their living voices should be heard.

Not only the newspaper and the magazine should make their contribution, but also the newsreel, the railway and steamship folder, the chamber of commerce advertising matter. Do not fail to give an opportunity to discuss the field of sports. The day's performance of Babe Ruth, Lou Gehrig, Connie Mack, Bobbie Jones, Red Grange, the Trojan squad, and Helene Madison are all absorbing topics to the adolescent mind. If the teacher will show an intelligent interest in the enthusiasms of the youth, they in turn will respond to the things which you emphasize.

How much more stimulating and enlightening such a course would be than the following procedure which is recommended in a widely-used high school English handbook on Robert Burns. After the class has studied "The Cotter's Saturday Night" these questions are to be given:

"Was the choice of the Spenserian stanza for this poem based on good reasons? For what species of poem is this form best suited? Why? Make a list of noted pieces written in Spenserian stanzas. What is the so-called "Burns stanza"? Are there samples of it in this book?

Pick out the archaic words in the poem. Explain why Burns used them.

Why are only ten of the stanzas in Scottish dialect, and the rest in almost pure English?

Observe how much Burns was indebted, both for ideas and for modes of expression used in this poem, to Gray, Goldsmith, Pope, Fergusson, and Thomson. Does this imply lack of originality? Was Burns, as a rule, a "bookish" poet?

Which stanzas are mainly descriptive? Which narrative?"

The library of books would be ransacked as never before for their more permanent forms of current life in books. Living people, including visiting authors, the returned traveler, the lawyer, the doctor, the merchant prince, and the worker from the marts of trade, would all be subpoenaed for their contribution. The pupils would eagerly pool the results of their own search and observation. They should be given fullest freedom to pass judgment upon all the grist brought for winnowing and evaluation. Candor, courtesy and toleration should pervade the atmosphere of every laboratory thus established. The teacher should guide but never domineer.

The course in civics would be merged in this course. Several of the splendid text books on community civics would be freely used, but they should not primarily be memorized for examination purposes. The particular sequence of facts would differ in various localities, and certainly from year to year, because what is current and alive must be the guide in selection. Such epoch-making books as those of Harold Rugg, "An Introduction to American Civilization" and "Changing Civilization in America"; Hughes' "The Community Citizen"; Edmondson's "Citizenship and Occupations," and others, should be constantly at

hand in duplicate, possibly as textbooks in some portion of the course, but they should only supplement and reinforce and not displace the day by day assemblage of the only sources of such a course.

For the highest degree of success this will require a skilled teacher, thoroughly alive. With this suggested freedom, however, most teachers would respond with a new zest. They would not be expected to know everything and would be primarily searchers with the pupils.

As schools are now organized, of course, the pupils would have to be awarded grades and credits. Many teachers will say at once, "How is it possible to give examinations and grades upon such varied and ever-changing work" How can it be standardized so that pupils in San Francisco can be compared with those in Philadelphia? It is to be hoped that just such living, growing courses as this will tend to force into oblivion such fossilized ideas as absolutely standardized courses and tests. Nothing in all the history of educational practice has been so narrowing as the standardized test movement. Why should boys in the cotton belt be required to memorize the same stereotyped bits of information as the boys in the lumber woods of Oregon? Apart from a very few items in reading, spelling, arithmetic, geography, and physiology, there are absolutely no facts which everybody must know in order to be educated.

In this course in current events the end is not stereotyped, standardized bits of information which all must be able to disgorge on examination, but rather a growing, expanding mental horizon and a living interest in the wondrous world about them. Any intelligent teacher should be able to record a grade that would not trouble his conscience or do injustice to the child without the intervention of any mechanized system of standardized tests. The zeal which the boys and girls evince, the kindling eye, the spontaneous question or cutting judgment, the facts reported, the nuggets discovered, the shelves ransacked, the improved expression, all of these should be sufficient basis for an estimate of the child's success in the course. How do we judge the candidate for Congress, the aspirant for the mayor's office, the lawyer to whom we entrust our legal difficulties, the mechanic to whom we take our flivver? How do we form judgments and classify the teachers of our children, the speaker at the Rotary Club, our neighbors in the block? Not by any artificial new-thought (*no*-thought) tests.

Our boys and girls are to be in charge of the world's affairs of tomorrow. We say the school is to prepare them for those problems. How can they be prepared when so much of their school time is occupied with exercises and materials so utterly remote from the affairs of the world today? We say that we are providing mental discipline. Why not give them chess or Confucian Chinese language? Who would crack nuts for the discipline of cracking them?

How shall we prepare the youth for intelligent opinions and votes on the world court, the league of nations, the Reconstruction Finance Company, the income tax, the sales tax, public or private ownership of public service utilities, relief of unemployment, tariffs,

restriction of immigration, Philippine independence, the Yellow peril, the dope traffic, and all the myriad of problems which they are soon to receive as a social heritage from our clumsy hands? A course in current events, this "forgotten one," the one "whom nobody knew," administered in the spirit suggested, would undoubtedly aid tremendously.

PURPOSEFUL ACTIVITIES IN THE McKINLEY SENIOR HIGH SCHOOL, HONOLULU

MILES E. CARY
PRINCIPAL, McKINLEY HIGH SCHOOL
HONOLULU, HAWAII

The McKinley High School, Honolulu, is the largest school in Hawaii. It is the most cosmopolitan high school in the world. It is a real "melting pot" of the nations. Principal Cary has been in charge of the school for nearly a decade. He has organized the school so that it correlates school with actual life situations in a manner realized in but few schools in the world. It is a living object lesson in school democracy. There is a great philosophy of education in action. The special editor of this number was visiting professor in the University of Hawaii during the summer session of 1930 and had an opportunity to learn of this at first hand.

THAT high school students should be dealing with problems and situations which are vital and of genuine significance to them is the central thought behind the reorganization program at McKinley High School.[1] High schools in America have had all sorts of aims, such as: preparation for colleges; training the mind; preparation for adulthood; conservation of our cultural heritage; citizenship, and so on. It is interesting to note how the various traditional aims of secondary education have neglected the purposes, needs, and interests of boys and girls. As a protest to the general woodenness of the traditional school, we have seen the recent development of the so-called "child-centered school" with its emphasis on activity—socialized recitation, dramatics, creative art, and music. However, some school people have not yet seen the need of change in our educational program, while others grasp at every new "fad" or "ism" that happens to be labelled "progressive." Neither practice will likely go very far toward truly vitalizing the high school curriculum.

To find our way out of present confusion appears to call for a new kind of pioneering. Bodé says: "We have long been familiar with the proposition that education is vital to a democracy, but our short-sightedness has led us to interpret this, in the main, as meaning that education must reach more people and other forms of society. We have not been sufficiently concerned to emphasize the fact that a democracy needs a distinctive type of education."[2] In such a school the *method* or *way* of carrying on in the classroom, and the general spirit of the school must be in harmony with the spirit of democracy and must give continuous practice in thinking. The reorganization program which is de-

1 McKinley High School, Honolulu, Hawaii, has an enrollment of 2,900 in the 10, 11 and 12 grades.

2 Bodé. Modern Educational Theories, p. 347.

scribed in the following paragraphs represents a genuine attempt to construct a high school curriculum in terms of the foregoing beliefs.

The schools of Hawaii have been in a state of ferment since 1918, when the Bureau of Education sent a survey commission to these islands. Dr. Frank F. Bunker and his associates made a number of rather drastic recommendations concerning the high school program.[3] However, the commission's report may have remained a matter of academic interest except for another important factor in the situation; namely, the rapid increase in high school enrollment.[4] During the period 1920 to 1930 thousands of Filipinos were brought to Hawaii to work on the sugar and pineapple plantations. Many Japanese laborers drew out of these industries and entered other lines of work. The children of imported laborers who were born in Hawaii showed little desire to enter upon plantation work, and, up to about 1930, most of them who graduated from high school found places in the so-called "white-collar" classes, either directly from high school, or after completing work in the Territorial Normal School, the University of Hawaii, or, in a few cases, a mainland college. In the meantime the cost of education was mounting rapidly.

Business leaders and politicians became alarmed over these developments. Insistent demands were made on all sides (except from the young people who were in school and their parents) that the public school program be made more "practical." Many people believed that it was the fault of the school that the island-born youths (of Oriental ancestry) were not doing plantation labor, and that the remedy for the situation lay in the direction of curriculum revision in the elementary school, and perhaps an arbitrary limitation of high school enrollment.

The public school leaders have been sensitive to this general condition of criticism. In 1920 the first junior high schools were organized in Hawaii. Curriculum revision in the high school got actively under way in 1923-24. A new program of studies for public high schools, patterned after the State of Washington program, was adopted in 1924. This was followed by the addition of many subjects, as well as course of study developments in all departments. In 1927 a division of research was added to the department of public instruction. The same year the "activity" program idea was put into practice in an experimental way in Honolulu, and soon spread to all parts of the Territory. In 1928 a "chronological" promotion plan was inaugurated in the elementary and junior high schools. At McKinley High School "failures" dropped from nearly 16 per cent in June, 1926, to less than 3 per cent in June, 1929. In the meantime the University of Hawaii had entered upon a more rigid selection policy, as indicated by the fact that, in September (1932) it accepted only 330 of the 1838 seniors who finished the high schools (public and private) of the Territory last June.

These changes apparently opened up the way for the present reconstruction program at McKinley High School.

3 A Survey of Education in Hawaii. Bureau of Education, Bulletin, 1920, No. 16, pp. 212-255.
4 The enrollment in all public high schools in Hawaii increased from 160 in 1900 to 4,570 in 1929.

Curriculum change has become the rule in Hawaii, rather than the exception. The parents of the public school pupils, the majority of whom could speak little English, have never openly questioned these curriculum adjustments. This has made it possible for the school leaders to make certain innovations here which might have been stoutly resisted as "fads" in a mainland community. McKinley High School has been particularly favored during this period of change owing to the fact that, because of its size and location in the center of population, to the teachers of that school have been delegated (beginning in 1924) the chief burden of curriculum and course of study development for the public high schools.[5] Because of a sentitiveness to our vital educational problems, which these teachers acquired during this period of stress and strain, it appears quite natural that they should now be found attempting to take another step toward adapting the curriculum to the real needs of our young people.

During this period of curriculum study and development at McKinley High School the following publications and leaders have had special influence over our thinking: *a.* The Cardinal Principles of Secondary Education,[6] and the various supplementary reports; *b.* "What is a Modern High School?" by Goodwin Watson[7]; *c.* "The Practice of Teaching in the Secondary School," by Henry C. Morrison; *d.* "Democracy and Education," by John Dewey.

Our program probably represents a kind of synthesis of the Cardinal Principles and the aims of the "activity" program. The committee which drew up the Cardinal Principles stated:

"This commission, therefore, regards the following as the main objectives of education: 1. Health, 2. Command of fundamental processes, 3. Worthy home membership, 4. Vocation, 5. Citizenship, 6. Worthy use of leisure, 7. Ethical character."[8]

A pamphlet describing briefly the "activity" program for the public schools of Hawaii includes the following statements:

Chiefly, the activity curriculum may be said to imply three things:

a. The first of these is the belief that it is the *business of the school to get thought into the everyday affairs of life.*

b. The second thing is the belief that *democracy in the school and in the classroom is a condition necessary to true education.*

c. In the third place, there is the idea that school work *should consist of active, constructive doings and makings,* with the things found around one, in an attempt to improve the conditions in which one lives. Learning is an active affair. Thought and learning can come about only when some constructive activity is under way.[9]

The Cardinal Principles have suggested certain fundamental considerations which should be followed in organizing our program. The "activity" program has suggested the *way,* or *spirit,* or *method* which should characterize the atmosphere of the school.

In order to accomplish certain re-

5 In June, 1932, the nine public high schools of Hawaii had a total enrollment of 5,545 students.
6 Cardinal Principles of Secondary Education. Bureau of Education, Bulletin, 1918, No. 35.
7 Watson, Goodwin. What Is a Modern High School? Hawaii Educational Review, XVIII, No. 4 (1929), p. 85.
8 Cardinal Principles of Secondary Education, pp. 10-11.
9 Progressive Education and the Public Schools of Hawaii. Division of Research, Bulletin, No. 5, pp. 9-10.

sults which we hoped for, it seemed necessary to make a number of changes in the traditional set-up. We were particularly anxious to improve the quality of the pupil-teacher relationships. The most important of these changes were:

1. English and Social Studies were synthesized, or integrated, to form what we have called the "Core Studies." We have endeavored to organize the new course around the real problems of our boys and girls. The "Core Studies" classes meet two hours each day and five days a week.

This change was made only in the tenth year in 1931-32. This year (1932-33) the "Core Studies" program has moved up into the junior year, and next year (1933-34) it will probably move up into the senior class. In other words, by September, 1933, we expect to have the whole high school working in our "Core Studies" program.

2. Instead of a daily program of five periods of English (or Social Studies) plus a study hall, a "Core Studies" teacher works with two "Core Studies" classes (four hours) and a study hall. We accomplish this by slightly increasing the size of the "Core Studies" classes, thus making the pupil-period-hour load the same as under traditional conditions.[10]

3. We have combined and enlarged our English and social studies "unit," or classroom, libraries. In addition, special books and blocks of library books are issued to "Core Studies" classes in connection with the study of the various "units" or problems. Besides, students are permitted to go to the library during the regular class periods.

4. The traditional five-point marking system (A, B, C, D, and F) has been discontinued. One phase of our new plan has to do with the teacher's estimate of the student's chances of succeeding in college. To quote from the report card: "In my opinion this pupil should be classified as: Recommended—Not recommended—Doubtful—in respect to his (or her) likelihood of succeeding in academic work beyond the high school."

The other phase of our marking system is the teacher's estimate, backed up by scores on tests and other objective data, of the individual student's progress. This new estimate is not a rank-in-class matter. According to this plan a "Z" pupil might make "good" or even "very good" progress; or an "X" pupil might show "poor" or "very poor" progress. The terms used to describe individual progress are: "Very Good," "Good," "Fair," "Poor," and "Very Poor." No credit is allowed when progress has been "very poor." Several standardized tests are used to check on objective learnings, and as supplementary data for the use of the university committee on admissions. The scores on these tests show the student's rank-in-class whenever there is a need for this sort of information.

5. Our "Core Studies" classes have become genuine homerooms.

That the "Core Studies" work has been built up around the vital problems of our boys and girls is indicated by the following questions or units, which were studied by these groups during the past school year:

10 Five English classes of 30 pupils each make 150 pupils per teacher per day. Two Core Studies classes of 37 or 38 pupils each gives 150 pupil period hours per teacher per day.

During the first two or three weeks all classes worked on the question (Orientation unit):—

How may we understand and improve our everyday activities?

Knowing McKinley High School better.

Your relation to the school—class and school organization and government.

How differently will an educated man handle his affairs?

What can we do to set the stage for improving our activities?

Some of the other problems studied by one or more classes were:

How Democracy Developed in Western Europe and Spread to the Rest of the World.

Is Japan Within Her Rights in Manchuria?

Russia and the Five Year Plan.

Our Local Tax Problems.

Unemployment in the United States including Hawaii.

Crime Situation in Hawaii.

The Improvement of Written and Oral English.

How May We Learn to Understand and Appreciate Good Literature?

A Study of Oriental and Occidental Family Life.

What Is My Attitude Toward Music and the Arts, and How May I Enjoy Them More Fully?

How Can I Spend My Leisure Time More Wisely?

Why Should We Contribute to the Welfare Campaign?

What Is Personality? How Can We Develop a Good Personality?

How May We Develop Good Study Habits?

Health.

What Is Education? When Is a Person Educated?

Each class was expected to deal with those "units" which were considered as basic. All completed units were kept on file and were made available to teachers whose classes might subsequently work with the same or similar problems. Except for the "Orientation" unit, there was considerable freedom in respect to the order in which units were studied. The teacher's judgment is the deciding factor. Some classes were ready for certain problems before others.

This staggering of problems or "Units" has tended to relieve the library of a tremendous strain in the matter of reference work. Under our former sophomore world history program, with a thousand students working on the same unit at the same time, teachers and students could call only meagerly upon the library for special reference help.

The procedure of the "Core Studies" class during the study of a problem is largely a directed study plan. Students work around tables.[11] After the class has developed a working plan, students go to work, singly, or in groups. Books, magazines, and other materials are made available in the classroom. The teacher is actively on the job and assists those who appear to need help. Guidance is sometimes given singly, sometimes to small groups, and at other times to the whole class. A problem is brought to a tentative close with reports, questions, and general discussion. Because the problems are real, the students are genuinely concerned over the various findings and hypotheses which are brought forth.

A considerable amount of discussion takes place in these classes, because the young people are somewhat familiar with the problems studied. Practice in written expression is had in

11 Most of the "Core Studies" rooms are equipped with tables and chairs.

connection with the various reports and papers which are written in the course of the development of a problem. The students play a very important part in carrying forward the work of the year. They help in caring for books, taking attendance, beautifying the classroom, keeping various records, and in many other ways. The variety of ways in which they contribute toward the progress of the class is indicated by the following extract from the annual report of Mrs. Beth K. Gantt, head of the "Core Studies" teacher group, in April, 1932:

Making the pupils real co-workers in our task of education.

Since this reorganization had promised to arouse the pupils to active citizenship, we were faced with need for doing something to make good this promise. The question of making the pupils genuinely concerned about their real problems and of so organizing them that they were in a position to do something about it, was a vital one. The set-up to effect this had included the following:

a. *Each class a unit of the Student Body government.*

Each social science, and therefore each core studies class, is a unit of the student body government, with a chairman who is the representative to the student body representative assembly. This tie-up brings the real problems of the student body government to the attention of each class and has stimulated the study of these. Such matters as attitude toward law enforcement, democracy, wise spending of student money, revision of the constitution, give rise to a real interest in the principles back of wise government. The value of this contract cannot be over-emphasized.

b. *Organization of the sophomore class.*

The class activities of the sophomores have very closely paralleled the classroom activities of the core-studies department. This was a natural development because each core-studies class was the unit of the sophomore class government and because in our core-studies classes we were attacking the problems which were of real importance to the students. No part of this class organization was forced upon the students. In fact, some of the finest features of it were suggested by the students themselves. The sophomore class activities this year have therefore become a valuable part of the educational program of the school. The organization is as follows:

(1) The sophomore executive council, made up of the officers of the class, the chairmen of the standing committees, and the advisors of the class and of the standing committees.

(2) The sophomore representative assembly, made up of the executive council and a representative from each home room (core-studies).

(3) The standing committees are the distinctive feature of the organization. Each standing committee is made up of a representative from each home room and has an adviser who is a core-studies teacher and in all but one case a core-studies sub-chairman. This has given the sub-chairmen a representative from every core-studies class to work with. A very direct contact with each class has thus been established and it has made possible much educational activity that otherwise would not have been practical. These standing committees have also brought into a position of leadership in classroom activities many more sophomores than would have been possible otherwise. Each committee has 32 members, for there are 32 regular sections of core-studies.

Standing committees for 1931-32.

1. Health
2. Play and Recreation
3. Home Relationship
4. Civic Service
5. Library

Additional committees this year (1932-33):

6. Reading

7. Good Life
8. Better English
9. Useful Work

About 300 sophomores are taking a place of real leadership in their various classes this year. There are almost as many juniors working on similar committees.

Each committee has planned and is carrying out a full program of useful and constructive activities. The work of each student committee is organized around the special emphasis of the "Core Studies" program. In this way our aims and purposes are actually put into practice.

a. The Library Committee takes care of all library books. This is an enormous task, since all books used in the classrooms are checked in and out of the central library.

b. The Civic Service Committee performs many useful tasks. This committee keeps a file of all sophomores who are willing to serve in their free time in whatever way they are able; such as typing, running errands, special cleaning, special assistance in the library, etc.

c. The Home Committee provides for many contacts with homes, particularly when students are absent from school.

d. The Health Committee assists in carrying out a very full health program which includes a skin test and X-ray survey to detect all traces of tuberculosis; also a dental survey which includes prophylactic treatments and minor repair work. Both the tuberculosis survey and the dental clinic are operated on a self-supporting basis.

e. The Social Committee directs a social and recreation program for the year which will include mass singing, picnics, and swimming, games, dances and hikes, etc.

f. The Reading Committee is helping to stimulate interest in good reading and keeps records of books read.

g. The Good Life Committee is constantly on the alert for opportunities to stress character and ethical conduct.

h. The Better English Committee works with the teachers in stimulating interest in better English. They keep records, lists of errors, word lists, etc.

i. The Useful Work Committee assists the teachers in emphasizing the importance of doing useful work both in and out of school as an important factor in our educational program. Rather full records are kept of these activities.

Each Core Studies class puts in approximately ten hours on the campus in connection with an extensive beautification program. We have about 47 acres of land, most of which was originally swamp, but this is being gradually reclaimed. The students pick up stones and trash, dig out weeds, plant grass, etc. We are following a beautification plan which was worked out about a year ago by two local landscape architects.

Something of the spirit of the sophomore class program is seen in the following extract from the report of the sophomore class president, Edison Tan, at the end of the school year: "The policies of these committees have been always to keep busy, do their part in solving problems, and, not only to work for the class but for the student body as well."

The truly vital part which the Core teacher plays in this program is indicated by the following questions which he endeavors to keep in mind as he works from day to day:

1. Are my pupils healthy, physically and mentally?
2. Are they performing some useful task as a regular part of their daily activities?
3. Are they becoming more thoughtful about their out-of-school occupations?
4. Are they practicing democracy?
5. Are they getting more art, beauty,

refinement into their out-of-school occupations?

6. Are they endeavoring each day to improve the conditions under which they are living, both in school and out?

7. Are they practicing each day, both in school and out, the method of intelligence?

8. Are they learning how to use a rich variety of subject matter?

9. Are they improving in their use of English?

We believe that we see the following advantages in our "Core Studies" program, over our previous set-up in which English and social studies were taught separately:

1. The teacher has fewer pupils with whom to become acquainted.

2. The teacher has pupils for a longer period each day, which gives him an opportunity to know them better.

3. The "Core Studies" teacher becomes the special counsellor, guide, and friend, of his students. The traditional school set-up is quite impersonal. Special counselling and home-room plans, which have usually been devised, appear to be largely superficial efforts to take care of the needs of the great mass of high school students.

4. In these classes the problems of our young people become also the teacher's problems.

5. The large undertakings of the school and community are treated in a thorough and systematic manner. In the former program they were only "side-shows."

6. The student body government has become a genuine laboratory for practicing citizenship. The "Core Studies" room elects a representative to the school representative assembly. The representative assembly meets during the regular school hours.

7. The fundamental objectives of education receive central attention in the curriculum of the school.

8. Much stress is placed upon teaching young people how to study. "Core Studies" teachers have an excellent opportunity to do this, because their pupils work under their direction for two full hours each day. Then, too, the problems which are studied are those which our young people are facing today. This makes the study process seem worthwhile to the students.

We try to avoid appearing unduly enthusiastic regarding our "Core Studies" work. What we are trying to do is to help our young people develop certain very fundamental dispositions or attitudes toward life. Perhaps we can, by careful observation, determine certain immediate results, but the more fundamental outcomes can only be judged in the future—say twenty-five years or more—in terms of the good life.

PROGRAM ADJUSTMENTS IN TEANECK HIGH SCHOOL

CHARLES LESTER LITTEL
PRINCIPAL, HIGH SCHOOL, TEANECK, NEW JERSEY

The present financial crisis is causing school administrators to study the problem of making one dollar and one square foot of space accomplish what two dollars and two square feet of space had accomplished before. Principal Littel has had a rich background of administrative experiences in Nebraska, Washington, and New Jersey. These he has drawn upon to help him solve the almost baffling task of balancing the budget in the face of phenomenally increasing numbers of high school pupils and shrinking finances.

TEANECK High School, like a good many communities in the New York Metropolitan area, faced the problem this year of housing nearly twice as many students as the building was originally designed to hold. To be exact, an enrollment of 1600 students was expected with our high school building designed to house only 990.

The Teaneck High School became a reality in February, 1929, when students that had been attending adjacent high schools were gathered together for their first session in the magnificent new million-dollar structure bearing that name. Almost on the first day the building was required to house its maximum of 990. In the fall of 1930 the enrollment had increased to 1189. This crowded condition and the fact that more homes were being built than in any other community of like size in the United States—two million dollars' worth during the year 1931—led the people to vote $650,000 for a high school addition in the spring of 1931. Just about that time the bond market fell, and although Teaneck Township ranked high in the security world, it has been impossible to get a bidder for these bonds.

The first year in which special measures were necessary to cope with the congestion was 1930-31. The measure adopted at that time was to schedule all study periods for all the students in the auditorium, thus relieving classrooms that had been used for study halls. Sometimes six hundred of more students were scheduled for the auditorium during one period. Two teachers were placed in charge, to try to keep order and instill proper study habits. Since the seats were of the conventional auditorium type, lapboards were provided which could be rested on the arms of the seats to give the students facilities for writing. This use of the auditorium made it possible to accommodate all the students, but the result educationally was far from satisfactory. Conditions were unfavorable for study, for two reasons particularly. One was that, from the nature of the seating arrangement, there was continual disturbance caused by the coming and going of students. Only the student in the end seat of any row could leave without causing disturbance. The other reason was, that the school is so designed that the stage of auditorium is the gymnasium.

There were physical education classes scheduled on the stage-gymnasium for almost every period, and the noise of the classes added to the confusion for any students trying to work in the study hall. Where high school students are placed under such conditions, one response is always experienced: they have a strong tendency to become destructive. This is exactly what happened here, as described by one of the teachers who supervised the study hall during some periods. He said that students amused themselves by using the wire hat-racks under the seats as musical instruments, and loosened them until the Board of Education in desperation had them all removed. Boys also put their feet against the backs of the seats ahead, both loosening the seats from the floor and scratching the veneer from the back. In fact, anything that could be removed was loosened and made away with. There were several instances of gum being left in a seat where a girl would have to sit the next period, thus ruining some very expensive dresses and incidentally ruining the tempers of several parents.

In planning for 1931-32, the congestion, with further increase of the student population to a total of 1,326, was taken care of by a different schedule. The use of the auditorium as a study hall was eliminated. The schedule was increased from 7 periods to 9, each 45 minutes in length, thus accomplishing the equivalent of adding 112 room periods to the capacity of the building. The senior high school came at 8:20 and the junior high school at 9 o'clock, while the earlier group was dismissed at 2:50 and the second group at 3:27. The noon hour was taken care of by a cafeteria that could feed properly only 200 students at a time. In 1930-31 the total student body of 1,189 had been turned loose to get their lunches and were given one and a half hours for that purpose. With the nine-period schedule it was arranged to have six 20-minute lunch periods, the first beginning at 11 o'clock and the last period ending at 1:15, with classes in session all the time. The two 45-minute extra periods were secured by utilizing the noon periods for classes.

Every available room was commandeered for classes, including the library, stack rooms, library corridor, the receiving room, two large toilet rooms, two corrective gymnasiums that were partitioned in the middle, forming two class rooms, and two study halls likewise partitioned, forming two more classrooms. All of this had provided a total of 48 classrooms and the auditorium, gymnasium—the stage of the auditorium—the library which would seat 200, and the cafeteria, which could be used for study hall purposes for 200 except during the noon period.

In the typewriting department it was found possible to take care of practically twice as many students as previously, without increase in room or faculty. The total number of typewriters in the department in 1930-31 had been 30; with the addition of 20 more typewriters the same room and teachers could handle 50 students per period, or an increase of 66%, or 140 students per day. The increase in the number of typewriters was made possible by removing the typewriting desks which were in use and substituting a much smaller one, but one sufficiently large for the typewriter and

the typewriting book. Since the typewriting department was taken care of by the same number of teachers as previously, it can readily be seen that while the capacity of the room was increased by twenty students, or two-thirds, the saving in teaching force amounted to the same,—two-thirds of the teachers employed in this subject, or a saving of $3,000.

The typewriting desks that had been in use were large desks with seven drawers, each with a separate lock. These desks were moved to a room formerly used as the supervising principal's office, which he had vacated to provide more space for the high school. The arrangement was to put the desks face to face down the middle of the room and assign a teacher to each desk per period for conference work. This made it possible for parents of students to have a place and a time when they could meet any teacher in the system.

For 1932-33 it was necessary to prepare for a further increase in enrollment, expected to reach a total of around 1,600 pupils. The plan of the previous year would obviously be inadequate, for the building had seemed crowded with 1,189 students under that schedule, and it seemed impossible to extend the limits of the day very much in either direction, although the nine-period schedule did not make the day any longer for any individual pupil than the seven-period schedule.

In the music department, both vocal and instrumental, it was found possible to increase the capacity by 100% in each of the seventh and eighth grades; two classes of seventh or two classes of eighth grade students were taught at a time, increasing the number in chorus or orchestra from thirty to sixty. The entire increase of three hundred registrations in music was thus taken care of by the same two music instructors in the same number of rooms. In the other departments such large increases were not possible; but by filling rooms to capacity and putting additional seats where possible an average increase of about five pupils per class was accomplished.

There were other things to be taken into consideration in building the new program, one of which was the students' attitude toward study. The Teaneck student body is made up of boys and girls from homes that are in better than average circumstances. There is nothing for them to do at home, nor does it seem to them especially urgent that they think of preparing for anything in the future. In other words, their easy home conditions have a strong tendency to make them feel a lack of responsibility. As a corrective for this, supervised study which allows the teacher to assist her students in the preparation of the advanced lesson for twenty minutes each day, seemed to be a worthwhile solution. To provide for this would require a period of sixty minutes in length, forty minutes to be used in instruction and the remaining twenty minutes for study period.

At first glance it would seem that the sixty-minute period in comparison with the forty-five minute period would demand more space rather than less. However, the contrary seemed to be the case. For instance, in the senior high school, manual training had required a double period of ninety minutes in length. The same had been true in the home economics. Under

the new plan the period of sixty minutes was sufficient. As a consequence, the saving of space in these departments was the difference between a sixty-minute period and a ninety-minute period, or one-third. The capacity of the building was increased by one-third immediately in these two departments, and also requirements as to faculty were reduced below what they would have been under last year's schedule, by nearly the same amount.

In physical education, three forty-five-minute periods are very little more than two sixty-minute periods would be. In fact, when dressing for gymnasium and taking a shower-bath are taken into consideration the difference in time is next to nothing, while the physical education teachers found that more can be accomplished in two sixty-minute periods per week than had been done in three forty-five-minute periods. Therefore the gymnasium classes were reduced in number from three to two per week, with more time per period.

It is interesting to note that the new supervised study plan has limited the number of students in the library and cafeteria to considerably under the capacity of each room, because a large part of the student's time which would otherwise be scheduled in the study halls, was accounted for by the twenty-minute study period extension to the class period. In fact, some periods of the day there are less than fifty in either the library or cafeteria, while each has a capacity of two hundred. For this reason, it is possible for the students who wish to use the library for reference work to do so without being crowded out. It is also possible for the teachers in charge of the cafeteria study hall to place their students in an advantageous part of the room as to light and ventilation.

From the standpoint of real supervision over the student's work, these study period extensions of the classroom periods are made much more effective than time spent in general study halls. In a general study hall, the teacher's function is mainly disciplinary. Most of those in the study halls during any period are likely to be working on the subjects which lie entirely outside the field of the teacher in charge. On the other hand, the supervised study portion of the sixty-minute classroom period is spent on the subject allotted to that period, under the teacher who is giving the work. If students have questions to ask, the teacher can answer them. It provides a situation much more beneficial for the student and much more satisfactory for the teacher.

One-hour supervised study also increased the capacity of the laboratory sciences: chemistry, physics and biology. Seven periods were required; under the forty-five-minute plan it was necessary to have a double period two days out of five. Five periods of sixty minutes each provided more minutes than required by accrediting agencies and required one period per day, which did not interfere with any class that might be scheduled a previous or succeeding period. Thus we were able to have seven classes in science per laboratory classroom, whereas before we had been able to have only four classes under the seven-period day and forty-five-minute schedule. This effected a saving of 40% in room and considerable saving in teaching force. The net result of this and the other sav-

ings in teaching force was, that whereas the Board had provided in the budget for seven additional teachers, it was found possible to handle the increased enrollment without any increase in the teaching staff.

The physical education program in all previous years provided a class for boys and girls each period of the day. Since there was only one gym available, the custom was to hang a net across the middle of the gym, giving the boys one side and the girls the other. This was rectified in connection with the new supervised study program by scheduling the classes so that the periods allotted for girls did not conflict with those allotted to boys.

If the schedule was to be built upon a sixty-minute period the question of length of day became an important one. Obviously, a day of nine hour periods would be out of the question. Even with a seven-period day, such as was adopted, only by the most careful study was it possible to keep the school day within manageable limits. The point which threatened to upset the entire plan was the arrangement of the lunch period. Under the previous year's schedule, the lunch periods of twenty minutes each had taken up three full periods. In each case one-half of the forty-five minute period had been devoted to lunch and the other to study hall. Thus twenty-five minutes in the middle of the day had been added to each person's schedule. If the student was to stay for six sixty-minute periods, short additional study hall periods would lengthen the day too much. After considerable rearranging, a seven-period sixty-minute schedule was worked out with the two noon periods each sixty-five minutes in length. This permitted the pupil to have twenty-five minutes for lunch and then go directly to a class.

The schedule now begins at eight in the morning, whereas the last year it began at 8:20. The first students to appear in the morning are senior high school followed at nine o'clock by the junior high school. The senior high school is dismissed at 2:50 in the afternoon, while the junior high school remains until 3:50. Those students who are through with their work a period earlier are permitted to go home at the end of their last class.

REQUIRED MATHEMATICS IN THE HIGH SCHOOL

M. Evan Morgan

PRINCIPAL, WEST SEATTLE HIGH SCHOOL
SEATTLE, WASHINGTON

All the old line subjects are being challenged. For nearly a hundred years it has been assumed that every boy and girl seeking a high school education must study algebra and geometry. It has been argued that these branches of mathematics have fundamental disciplinary values and that they are also practical. Mr. Morgan views the question first, from the outlook of a mathematician. He majored in mathematics and was regarded as a brilliant student. Second, he has taught high school mathematics for a decade in two large city high schools. Third, he is now principal of one of the large high schools in Seattle.

A STUDY of the curricula of a number of secondary schools, chosen at random from educational systems throughout the United States, shows that the ratio of required to elective subjects varies widely. English is most universal as a requirement, followed by history and then mathematics. A large proportion of the courses studied offered a choice between algebra and general mathematics for satisfaction of the mathematics requirements.

If mathematics is desirable as a part of the foundation of nearly all pupil study, what type of mathematics is desirable? What is its purpose? What phases of the subject will best contribute to this purpose?

In an effort to approach the answer to these questions I shall quote from two sources. First, a Symposium on Commercial Education, from the Southern California Commercial Teachers' Association, October, 1931, asserts a principle with which few would take issue. "The aim of all education must be to prepare the youth of today for their Lives of tomorrow—to prepare them to lead happy, useful lives in every possible respect and in whatever field of endeavor they may find themselves."

My second sourcebook of principles is Bulletin, 1921, No. 32, Department of the Interior, Bureau of Education, "The Reorganization of Mathematics in Secondary Education." This is a summary of the report by the national committee on mathematical requirements, and was written more specifically in an endeavor to discover what is desirable in mathematics teaching rather than what mathematics is essential to all. It is a very valuable study from which to start this discussion. We may first see what the specialist believes his entire field has to offer. Chapter II deals very largely with what may be described as "general aims," that is to say, aims which are valid for large sections of the school population and which may properly be thought of as contributing to a general education as distinguished from the specific needs of vocational, technical, or professional education.

Three classes of aims are listed. These are: (1) practical or utilitarian, (2) disciplinary, (3) cultural. We are reminded that these three classes are not mutually exclusive. By a prac-

tical or utilitarian aim, in the narrower sense, is meant the immediate or direct usefulness in life of a fact, method or process in mathematics.

The following results are listed as desirable for all: (a) increase in understanding of the nature of the fundamental operation as gained through a study of the laws of algebra; (b) exercise of common sense and judgment in computing from approximate data; (c) the development of self-reliance through the consistent use of checks on all numerical work; (d) an understanding of the language of algebra; (e) appreciation of the significance of formulas; (f) the ability to understand and interpret correctly graphical representations of various kinds; (g) familiarity with the geometric forms, common in nature, industry and life.

It is the opinion of the committee that all pupils should be required to take work in arithmetic, intuitive geometry, algebra, numerical trigonometry, and demonstrative geometry. This, of course, excludes much of what is now taught under these heads.

I take no exception to the findings of this committee as suggesting what would be desirable information for all. It is not in a critical spirit that this report is being reviewed. I do, however, feel that one who is close to the problem will recognize that valuable as these attainments may be, other factors will largely modify our aims for that large group who are taking only the one required year in an already overcrowded course.

The following factors are suggested as valid after some considerable study of our school product:

1st. A general mathematics which offers a little algebra, a little geometry, and a little trigonometry contributes practically nothing to the average pupils' working equipment. Pupils who complete a year's work in algebra have little more than the "knowledge of the language of algebra" suggested by the committee as being desirable. Offer a simple test containing practical problems for solution to these one-year students one year after the completion of their course if further proof is needed. We grant that such a course may open new fields for study to those who are so inclined, but contend that few are so inclined.

2nd. The average text book is written with the apparent purpose of presenting mathematical principles rather than useful working equipment. The following illustration may bring out this point. A class of adults in evening school were studying radio construction and theory, using a government publication containing tables for computing capacity and inductance. The class had reached the point where 95% could determine the correct answer to a problem. Finally a new condition was introduced. Instead of giving only those facts pertinent to the solution of the problem, the instructor took his material from life. The aerial wires were covered with green and red insulation. The boy who constructed this aerial had no other wire for his purpose. On this problem only 18% of the class offered an answer. As long as every factor introduced was needed for the solution, all went well. As soon as selection of pertinent factors was involved, training was found faulty, and yet every problem which life brings to us involves just this selection. It is pos-

sible that fewer principles studied in a wider range of settings would produce more permanent values.

3rd. Some psychologists say it is as important to be able to forget as to remember. A good executive develops a system which reduces the need of his personal consideration to a few problems which have not yet been placed in the system. The principle of conservation of energy would point to the wisdom of allowing usable information to crowd out that for which we find no application. Subjects usually classified as commercial are often of this usable type. In my own experience, a year of bookkeeping, taken after majoring in college mathematics and after considerable graduate work along the same line, has had more value in school, business, and home than all of the other. It is usable because, as presented, there was no attempt to exclude extraneous materials not pertinent to problem solution. Selection was definitely involved, and problems were of a type met frequently in subsequent life.

Being possessed with the aforementioned convictions, it was with considerable interest that I observed the efforts of Mr. V. L. Dotson, a progressive educator on my faculty, who also was convinced that the perfect course for a single year's work had not yet been devised. His is not offered as the final word, but as an attempt to practice those principles which determine the carryover in any field. I am convinced that pupils so trained will provide their own generalizations and carry over into other fields better than one who, as is so often the case, has the generalization without the present necessity of application. Mr. Dotson's course calls for accuracy and understanding rather than facility in manipulation common to many courses in Junior Business Training.

The following brief summary, for which Mr. Dotson deserves entire credit, is given:

The general theme was, "THE SAVING OF MONEY." The course was worked out from three standpoints:

1. To find the need to save money.
2. To find out how to save money.
3. To learn to invest wisely.

He tried to see that each problem should in itself contain information of value and that the work would be so new to the pupil that it would help to hold his attention and interest.

1. BUDGET.
   a. Each pupil taught to keep a budget of his own expenditures on form provided by the teacher.
      1. Necessity of planning before spending emphasized.
      2. Check made weekly to determine if expenditures were within the weekly estimate.
   b. Each pupil made an itemized list of all his expenditures for the year.
      1. Clothing.
      2. Recreation and amusement.
      3. Etc.
   c. Each pupil collected data showing cost to heat, light and rent a house.
      1. Each pupil brought data concerning his own home.
      2. Information obtained from contractors and realtors.
      3. Average cost for lighting obtained from Puget Sound Power and Light Company and City Light.
      4. All data assembled for whole class.
   d. Data from government statistics showing cost of living studied.
      1. Classified according to the divisions of budget.

2. Many problems in figuring percentages in making classifications.

e. The making of the budget.
1. Its usefulness.
2. How it helps to save money.
3. Savings and thrift emphasized.
4. Making of budget thoroughly explained. (Sources of information. Teacher, books, pamphlets, newspapers, etc.)

f. Model budgets collected and studied.

g. Each pupil made a budget for a year for Harrison family. (See below.)
1. Family: man, wife, boy and girl each in High School.
2. Income $145 per month.
3. Estimate made independently by each pupil by the month for a year for items of budget in detail.
4. Problems in health, life, fire, theft, auto insurance.
5. Problems in taxes, assessments.
6. Owning vs. renting a home.
7. Cost of keeping an auto. (A few were unable to plan to keep an auto in this budget.)

h. Each pupil compared own expenditures with the boy or girl of their budget.
1. Some came to the conclusion that they were demanding of their parents an unfair portion of their own family income.

i. Ways of cutting down expenses investigated.
1. Problems showing savings in buying in large quantities.
2. Problems showing savings when buying for cash.
3. Problems showing savings when buying a store's "leader," etc.

j. Ways of having greatest enjoyment at least expense.

II. Cash Buying vs. Installment Buying.

a. Problems in finding the true interest rate when buying on the patrial payment plan.

b. Problems from many sources secured by pupils showing interest rate actually being paid here in Seattle. (Rates from 10% to 150%.)

c. Ways of building up credit at bank studied.

d. Problems showing saving made by borrowing at bank and paying cash.

e. Salary and personal loan companies investigated, showing true rate paid at these companies (33% to 400%.)

III. Negotiable Papers (Forms furnished students).

a. Proper way to write a check.

b. Bank drafts, time drafts, trade acceptance, notes.

c. Indorsements.

d. Bank discount.

IV. Thrift and Investment.

a. The necessity of savings while earning.

b. How a savings bank operates.

c. How money invested regularly grows.

d. How to build up an income.

e. How to invest the accumulation of your savings.

f. Loaning money on mortgage.

g. Investing in bonds.
1. Price and yield.
2. Judging the safety of a bond.
3. Stability of bonds.

h. Principles of investment.
1. Safety of principal.
2. Certainty of income.
3. Rate of return.
4. Marketability.
5. Diversification.

i. Preferred stock as an investment.

j. Investing in common stock.

k. Diversified investments.

l. Investments to avoid.

V. Insurance.

a. The need of carrying life insurance.
1. Protection to dependents.
2. Provision for old age.
3. Protection against disability.

b. Average estates left by men at various ages.
   1. Showing need of safe way to save.
   2. Insurance certain way to save, premium must be paid or lose insurance.

c. Different kinds of life insurance.
   1. Ordinary.
   2. 20 payment.
   3. Endowment.

d. Kind and amount of insurance to carry.
   1. Cost (graphs made showing cost increase with age).
   2. Cash surrender value.
   3. Dividends.
   4. Relation of salary, dependents, insurance.

e. Fire insurance.
   1. Seattle fire insurance zone map.
   2. How to determine amount to be carried.
   3. Determining if own home properly insured.

f. Auto insurance.
   1. Personal liability.
   2. Property damage.
   3. Fire and theft.

THE HARRISON PROJECT.

The Harrisons own their 6-room home in West Seattle, valued at $5,000. It is heated by a hot-air furnace; an electric range is used for cooking. The home is mortgaged for $2,500. It is a straight mortgage bearing interest at 7% payable semi-annually. The size of the lot is 50′ x 102′. A new paving assessment of $176 is to fall due June 10. All other assessments are paid. The furniture is all paid for. They own a 1928 Model A Ford. Mr. Harrison carries two life insurance policies: a 20-year policy for $3,000, taken out when he was 22 years old; an ordinary life policy for $2,000, taken out when he was 26.

The Harrison family consists of Mr. Harrison, age 38, now employed as bookkeeper at a salary of $1,680 per year, Mrs. Harrison, age 36, Henry, age 15, sophomore in high school, and Elsie, age 16, junior in high school.

Using the outline given below, make a budget for the Harrison family.

Your grade on this work will depend on the reasonableness and the workability of your plan and the detail to which you go in making the budget.

I. Savings
   a. Life insurance.
   b. Other forms of savings

II. Shelter
   a. Rent, or
   b. Home ownership
      1. Principal payment
      2. Interest
      3. Taxes
      4. Insurance
      5. Upkeep

III. Food
   a. Groceries
   b. Meat
   c. Vegetables
   d. Milk
   e. Bread
   f. Lunches

IV. Clothing
   a. Mr. Harrison
      1.
      2.
      3.
   b. Mrs. Harrison
      1.
      2.
      3.
   c. Henry
      Boys work out in detail
   d. Elsie
      Girls work out in detail

V. Operation
   a. Heat (kind)
   b. Light
   c. Water
   d. Range (gas, coal, or electric or combination)
   e. Household supplies
   f. Telephone
   g. Repairs
   h. Service
      1. Laundry
      2. Barber
      3.
   i. Insurance on furniture and household goods

VI. Advancement
- a. Church
- b. Benevolence (community fund)
- c. Health insurance
- d. Dentist
- e. Oculist
- f. Doctor
- g. Books, magazines, and papers
- h. Clubs
- i. Lodges
- j. Henry's allowance
- k. Elsie's allowance
- l. Mrs. Harrison's allowance
- m. Mr. Harrison's allowance
- n. Car
  1. Payment per month
  2. Depreciation
  3. Insurance
     - a. Fire and theft
     - b. Property damage
     - c. Personal liability
  4. Gas
  5. Oil
  6. Tires
  7. Repairs

The expenditure in each subdivision should just total to equal the allowance for that budget division. The total of the six budget divisions should equal the income for the year.

A project for the student's own home, modeled on the Harrison project, was followed by the question: Am I taking a fair share of my family income?

Do we not need more of this type of education? I can hear the many objections of the traditional mathematics instructor. We have no text with a principle followed by problems involving the use of that principle. The order has been reversed. We discover a problem of interest to us because it bears on happy living. The need of the principle for its solution becomes evident. The solution is remembered because it satisfies a need. We grant that fewer principles will be studied, but contend more will be understood and become a part of the pupil's working equipment.

SONNET

The mountains quake, and boiling lava rains,
Epeiric seas invade the desert lands,
The highest peaks are shrunk to peneplains
And forests find their graves in drifting sands.
The winged dragon and the dinosaur
In teeming splendor rule the warm morass.
For one poor fleeting day they strut, and are
Foredoomed to abdicate their power, and pass.

The kingling, Man, a tiny sceptre wins
And waves it in a short, pretentious rule.
His passing, when an Age or two unspins,
But faintly ripples Time's unbottomed pool.
Bewildered, he must cede the shifting stage
To nobler actors in a nobler age.

Norris Potter, Jr.
Northeastern University.

DEPARTMENTAL SUPERVISION IN THE SECONDARY SCHOOL

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As high schools have increased in size immediate supervision by the principal has decreased. Departmental organization which was entirely lacking in the smaller high schools has now become the rule in large high schools. Professor Willey gives many practical suggestions for developing supervision through this modern organization.

IN all schools employing two or more teachers in the same general subject there should be some form of departmental organization. The most desirable and logical plan is to have a permanent head, in whom responsibility and leadership for good results is centralized. The chief value of departmental organization lies in its contribution to the improvement of classroom instruction,[1] which, after all, is the primary purpose and aim of all constructive supervision. Certainly the efficiency of the classroom work that results, as the departments become more highly centralized and specialized, more than justifies the slight increase in expense that departmentalization produces. Where there are several teachers in the same field, certainly someone must take the lead in laying out the course of study and in arranging for the proper correlation of effort and result. Many principals have attempted to act in this capacity for all subjects, even in comparatively large schools. Casual inspection offers abundant evidence of their failure in all but the most exceptional cases. Except in small schools it is obviously impractical for the principal to attempt to look after the details of departmental work.

The departmental head usually finds in his category of responsibilities the following duties:[2]

1. Responsibilities for such matters of departmental routine as inventories of equipment and requisitions for new material, the distribution and accounting for free textbooks, preparation of library lists, etc.
2. Preparation of course of study.
3. Examination and recommendation of textbooks.
4. Assignment of teachers to classes on basis of special fitness.
5. A study of the relative effectiveness of individual teachers and the whole department.
6. Determination of standards and measurement of results within the department.
7. Organization and conduct of departmental meetings.
8. Constructive supervision of teaching within the department.

We are concerned with the last of the duties listed above, i. e., the duty of supervision of instruction within

1 "Secondary School Administration," J. B. Edmonson, Joseph Roemer, F. L. Bacon, Chap. II, page 65.

2 This list is taken from those given by F. W. Johnson, "Administration and Supervision of the High School," and by Edmonson, Roemer, and Bacon, op. cit.

the department. With the departmental head as the supervisor we would have an ideal situation, for the supervisor would deal with a very limited number of teachers and a narrow range of subjects. It affords a high degree of specialization and centralization. In general, the departmental head is merely a glorified teacher, usually receiving from $200 to $500 more compensation than the regular teachers.

A more comprehensive and enlightening view of the problems and responsibilities of the departmental supervisor may be gained from a study carried on by Northwestern University,[3] in which twenty high schools in Illinois, twelve having departmental heads, were surveyed. The problems faced by eight departmental heads and the frequency of the problem as stated by them, revealed the following results:

1. Meeting individual differences in the classroom 1
2. Developing the unit plan..... 4
3. Finding objectives for the various courses 2
4. Development of citizenship consciousness 1
5. Mixture of classes—sophomores and freshmen together 1
6. Determining minimum essentials in social studies 1
7. Problem of building a proper sequence 1
8. Getting teachers to be conscious of problems 1
9. Measuring results 1
10. Getting pupils to realize value of study 1
11. Problem of slower pupils in required classes 1
12. Better organization of American History 1
13. Building a course of study in modern history 1
14. Lack of adequate material..... 1

This comprehensive list of problems shows us the situations faced by any supervisor. Certainly a specialist in the field could treat the situation much easier than a general supervisor could. Although some of the problems might be easier remedied by one skilled in general supervision, the majority of these are specific and demand specific study and treatment.

In a specific study carried on by Northwestern University[4] an interesting light was thrown on the teacher's reaction to the supervisor. Classroom teachers revealed their preference as supervisors as follows:

Preference	*No. Preferring*
1. Department head	58
2. Principal	14
3. Both or joint	22
4. Superintendent	2
5. No preference	2
6. Special supervisor	7
7. Don't know	2

Their reasons for preferring the department head as supervisor were as follows (ranked):

1. Because of his better knowledge of the subject.
2. Because the supervision is more detailed.
3. Because he is less encumbered with administrative duties.
4. Because he is in a position to articulate causes.
5. Because of his likelihood of more personal contact.
6. Because he demands less restriction.
7. Because he is more sympathetic with problems peculiar to department.
8. Because I know of no other system.

[3] Northwestern Contributions to Education: "Supervision of Instruction in High School," J. M. Hughes and E. O. Melby.
[4] Northwestern Contributions to Education, op. cit., p. 23.

This last list is self-evident. It is the best argument possible for the departmental supervision plan.

There are many ways by which the departmental supervisor may help his teachers. We may list some of them as:

1. Giving teachers individual help of more or less personal nature.
2. Help teachers improve instruction.
3. Actively helping in improvement of methods to be taught.

It is in the departmental meeting that the head is able to do the most constructive work. These meetings may be called at any time and should be carried on in an informal way. The supervisor or departmental head of course should preside. Departmental heads in twenty Illinois schools mentioned the following as topics discussed in conferences:[5]

Topics	*Frequency*
Indicate lines of improvement	3
Entirely informal discussion	3
Asks about problems	2
Recognition and approval of teachers' work	1
Discusses progresses of pupils	1
Discusses materials	1
Handling of special problem pupils	1
Learns methods of instruction	1
Note-book work	1
Treatment of ability groups	1
Considers work of individual pupils	1
Gives diagnosis of lessons	1
Leads teacher to find her own way	1

The wide range of things discussed in the departmental meeting, as listed above, indicates the valuable piece of work that may accrue from these meetings. All those present in the meeting are specialists in the same field, interested in the same piece of work and more than likely face similar problems:

Social Science teachers in twenty Illinois schools, 194 questionnaired and 116 interviewed, mentioned the following aids to their teaching methods that they got from departmental meetings of the Social Science teachers:[6]

Advantages

	Questionnaired	Interviewed
Professional knowledge added to	55	5
Content knowledge of teacher is expanded	25	7
Help on classroom difficulties is received	44	9
Promotes needed uniformity within the dept.	89	17
Builds up an "esprit-de-corps" within the dept.	56	11
Aids teachers generally	80	24
Helps with administrative routine	3	8

Ere we seem to take too partisan a stand for departmental supervising, let us remember that departmentalization and departmental supervision present difficulties. Nutt,[7] who is strongly opposed to the departmental plan, attacks it on the grounds that the supervisors are oftentimes only part-time supervisors and part-time teachers, with no frequency or regularity in their visiting, and that it arouses jealousies because of the unequalness of the departments.

It is true that some of the specialists in the high schools are too ignorant of other subjects in the curriculum; that their work cramps their interests and lessens their esteem for other subjects, and even go so far as to minimize the significance of the problems of a colleague across the hall.

5 Ibid., p. 43.
6 Ibid., p. 55.
7 "Current Problems in Supervision of Instruction," H. W. Nutt, p. 149.

Sometimes they become walled in, failing to see their own subject in its broader relations.[8]

Yet, does this justify the abandoning of departmentalization? By no means. It is a new movement and deserves a fair trial. Its many values are obvious, and only a few have been mentioned in this short article. Drawbacks to the plan, therefore, must be recognized and removed, while the departmental work goes on.

8 "High School Administration," W. A. Cook, Chap. VII, p. 134.

STEP BY STEP

Petal by petal, leaf by leaf, the roses
Unfold beneath the sun;
Hour after hour, until the long day closes,
The work of life is done.

In many a humble spot some peerless flowers
Have grown from common seeds;
And many a worker with his humble powers
Has wrought immortal deeds.

You are the builder of your destination;
The keys are in your hand;
With words and deeds you build a life's foundation
On solid rock, or sand.

The words of truth, the deeds of high endeavor,
Open the gates with ease.
Let not the golden portals close forever
Because of rusty keys.

For step by step along life's pathway wending
You live the long days through,
And you can take beyond the journey's ending
Only the good you do.

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DOES THE FUTURE OF SECONDARY EDUCATION DEPEND UPON STATISTICAL RESEARCH IN FOUNDATIONAL THINKING?

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Some of the leading educational thinkers thoroughly trained in modern research methods fortunately recognize that no one technique can prove a panacea for educational ills. The combined wisdom of the technician, the educational philosopher and the layman are all needed to clarify our thinking and point the way to a new day. Professor Douglass in this article makes a notable contribution to that end.

IT seems clear that if education is to avoid the shoals of misdirection or escape the driftwood currents of fatal unchecked traditional tendencies, it must in the next few decades enjoy clear-visioned leadership. That we have public education today free, efficient, and well nigh universal is due in large part to the vision of leaders who sensed the needs of their times and foresaw the necessity of an informed thinking citizenry.

On the other hand, the improvement of teaching procedures, and the increase of accurate information can be most intelligently accomplished upon the basis of careful, refined objective investigation. The field which will respond to crude subjective methods is greatly exhausted. Lacking precise experimentation and measurement the relative effectiveness of procedures may be badly evaluated.

We have, therefore, two approaches to problems of education. It has seemed to some that the subjective and the objective methods were mutually opposed, inconsistent and alternative.

Until the present century the latter was little employed. Along with the development and rapid growth of the testing movement and the introduction and application of experimental and statistical techniques, there has gradually taken form the tendency for students of education to group themselves into two opposing camps. Teachers, principals, supervisors and superintendents as well as professors of education, philosophy, psychology and sociology have in large numbers aligned themselves with one of the groups, which, for convenience, we may call the "objective" or "quantitative," and the "subjective" or "philosophical" groups.

Those who share the former persuasion have not taken pains to conceal their contempt for "arm-chair" methods, with its premium upon exemption from collecting basic data, from tedious tabulating and from difficult technical treatment and interpretation of data. They have gone so far as to say that there is no such thing as philosophical research—if it is philosophical, it is not research. "Subjective" has come to mean for them opinion, bias, error, anathema. They cite the long history of authoritative dogma, the steady succession of error in scientific matters that characterize the cen-

turies in which philosophical, empirical, deductive methods prevailed—often quoting that eminent zoologist, the late David Starr Jordan, who remarked that there never was a time when we knew the answers to so many questions as in the thirteenth century—but that the pity was that most of them were wrong. They dwell upon the uphill struggle of the pioneer scientists of the fourteenth through the eighteenth centuries, oppressed and hampered by those who preferred to believe their reason rather than their eyes, and by their illegitimate twin offspring, superstition and dogma.

Yet frankness and warmth of argument has not been confined to the quantitative group. To these, some of the "philosophers" have applied a variety of epithets not calculated to appeal solely to the logic or merits of their position — "measuring worms" and "nose-counters" and others calculated more to gratify the desire of their authors to vent their feelings and to sway their listeners by appeal to ridicule and the pugnacious instinct rather than to clarify the issues. Some have condemned the whole movement as "undemocratic," "hocus-pocus," useless.

The indictments of others have been directed at a more limited area—the type of problem, or the failure to use the best logic along with mathematical techniques. Protests of the latter type include a rather recent one from an outstanding thinker in the field of the fundamental philosophy of American secondary education, Professor Thomas H. Briggs of Teachers College of Columbia University, who exclaims:

"We have become a profession of tabulators. By reference to our shelves, groaning with published technical studies, we can find the number of identical twins born of Caucassian parents with I. Q.'s between 100 and 123, who fail to pass second term Latin in the ninth grade of junior high schools in Arkansas, with A. D., P. E., and sigma all neatly charted."[1]

One cannot but experience a strong tendency to chuckle at this passage. It is clever, sparkling with irony. It does, however, bear the earmarks of a type of argument which puts terrific strain upon reason. One can hardly fail to note the straw which protrudes so abundantly from the hypothetical and helpless victims — the identical twins who fail Latin in Arkansas junior high schools.

In spite of whatever reservations one may have as to the representativeness of Professor Briggs' example of quantitative research, one cannot be impressed with his keen sense of the fitness of things and his impatience with the apparent concern of the great mass of teachers in education today who focus upon the details of perfecting a structure which, perhaps after all, in the interests of education and society, would best be completely remodeled. Some three years ago I expressed myself in this connection as follows:[2]

"Tradition, conservatism and inertia apparently maintain a strong grip on research workers. Perhaps the safe way to make progress is through evolution rather than revolution, but it seems that curriculum research (and

1 "Jeremiah Was Right." Teachers College Record, Vol. XXXII, pp. 679-695, February, 1932.
2 "Curriculum Research During 1929," School Review, Vol. XXXVIII, pp. 661-2, November, 1932.

certainly, to a greater extent, practical curriculum revision not involving research) is largely patchwork and tinkering and the rehabilitation of an outworn shell by the shuffling-around of old materials.

"The high school curriculum is still thought of in terms of four major subjects and one or two minor subjects, and in terms of five-hour classes. Algebra, American History, traditional English classics, Latin grammar, Caesar's *Gallic Wars,* Cicero's orations, plane and solid geometry, and other traditional units of subject matter are taken for granted in the program of studies; and, with these guideposts fixed, some vocational studies (usually already formalized), some music, some art, and (reluctantly) a little physical education are sprinkled in. When the school system of a large city initiates a project for the revision of the curriculum, experts from various colleges of education are called in to give lectures, committees are appointed, and the whole system becomes fired with the fever of a great undertaking . . . ; but, somehow, the resulting courses of study as actually taught in the classrooms persist in presenting a striking resemblance to the old courses. Sometimes the resemblance is so close that one has to look closely to be sure that the courses are not the old ones.

"The writer believes that research is essential to the study of problems relating to the curriculum, but he also believes that to a large extent the contributions of research to the secondary-school curriculum have as yet been trivial and have been based on preconceptions which in themselves are not established on scientific foundations and which to many educators seem definitely unsupportable. This situation is, perhaps, to be expected because the project of a candidate for the degree of Master of Arts is, of necessity, limited in scope and because the majority of other research workers, having no opportunity to carry on experimental work, must employ indirect methods of study in investigations of the curriculum. The present organization and status of the curriculum is certain to determine the nature of many projects. Like other researches of the past generation in education and elsewhere, current secondary-school curriculum researches, in the main, give the impression of being discouragingly inadequate in depth and scope."

Professor Briggs has advocated a commission of leading thinkers in various fields to study the problems of secondary education with a view to getting a better perspective and to reduce the appalling gap that lies between the curriculum of secondary schools and the present problems and needs of American society. His suggestion that there be made available a sum of money, large enough to command the efforts of a committee of the best minds over a period of time, would in all likelihood result in much more educational progress than a similar or larger sum spent of "researches" of the Arkansas variety.

The contributions of the deliberations of such a commission would, however, depend upon the personnel of the commission. We have had in the last forty years a steady succession of commissions, notably the Committee of Ten in 1891-3, the Commission on Reorganization of Secondary Educa-

tion, the Classical League Investigation, the National Committee on Mathematical Requirements and the Modern Language Inquiry. The net important outcome of these has been very largely to preserve the status quo with respect to the major lines of educational philosophy and organization. While the Commission on Reorganization of Secondary Education has, in the fifteen years since their reports began to appear, served to popularize a modern version of Herbert Spencer's aims, the curriculum of the secondary school has been effected only by minor readjustments. The present National Survey of Secondary Education has been conducted along the lines of a fact-gathering project. It can hardly be expected to furnish any basis or great stimulus for a re-organization in the light of modern needs.

Professor Briggs would probably take care that his commission should not suffer the fate of previous commissions, by providing that it be composed not entirely of objectivists in education. The perspective of such groups has repeatedly evidenced unmistakable symptoms of acute myopia. He would include a large predominance of men of tested vision trained and informed in many fields, sociology, economics, political science, industry, business, philosophy, agriculture, and science. Even this wise proviso will not insure freedom from tradition, from antiquated or distorted concepts of what constitutes education and how it takes place, and from lack of imagination which would transcend the school subjects as now organized.

Yet Professor Briggs is on the right track. John Dewey probably made his greatest contribution to education in pointing out to us the necessary relation of educational programs to the changing needs and problems of society. Alexander Inglis took up the cause and carried it to his untimely death. William McAndrew has apparently decided to spend the strength of his remaining years in attempting to awaken people to what seems to him so clearly the necessity for a thoroughgoing transformation of the aims and program of secondary education. Beard in the new "Charter for the Social Studies" has given excellent expression to the needs as they affect the social studies in the secondary school curriculum.

Bode, Counts, Kilpatrick, Snedden, Coffman, Rugg, Bagley, Beard, Peters, Finney, Norman Thomas, and others have taken up the challenge.[3] Numbered among these are men like Counts and Rugg who previously made "objective" contributions to education. The responsibilities and opportunities of the school for making democracy possible and as a necessary

3 Bode, Boyd H. "Modern Educational Theories."
Counts, George S. "Education and Industrialism." Harvard University Press, 1925.
Counts, George S. "Dare the School Build a New Social Order?" John Day Publishing Company, 1932.
Beard, C. A. "A Charter for the Social Studies," Report of the American Historical Association, Investigation of the Social Studies in the Schools. Charles Scribners' Sons, 1932.
Bagley, W. C. "Education, Crime and Social Progress."
Dewey, John. "School and Society." University of Chicago Press.
Dewey, John. "Democracy and Education."
McAndrew, William. "A School Man's Breviary." School and Society, Vol. 34, pp. 767-770; Vol. 35, pp. 327-8, 471-2, 692-5; Vol. 36, pp. 181-3, 309-10.
Peters, C. C. "Objectives and Procedures in Civic Education." Longmans Green, 1932.
Rugg, Harold O. "Culture and Education in America."
Briggs, T. H. "A Vision of Secondary Education." Teachers College Record, Vol. XXXIV, pp. 1-18, October, 1932.
Briggs, T. H. "The Great Investment." Harvard University Press, 1930.

agent in permanent and combined social progress have been recently discovered. Washington, Adams, Jay Madison, Monroe, Gallatin, Webster, Stevens, in fact every keen student of American democracy down to Wilson, Roosevelt, and Hoover have left in print or writing statements of their beliefs in the necessary attuning of public schools to the difficulties that face democracy. But it is certain that these difficulties in recent years, have become rapidly increasing in danger, while in the schools as Mark Twain said of the weather, "There has been much talk but little done about it." Instead while dark clouds have gathered, the schools have exasperatingly remained hypnotized by the absurd theories and programs of those, who while imposing a philosophy and curriculum of humanistic discipline and scientific materialism upon the secondary schools, have, perhaps unwittingly, played into the hands of those who preferred to divert the younger mind from the weaknesses of the present organization of society.

Certainly the mind of the student of education is large enough to entertain two ideas simultaneously. There need be no conflict between the so-called "armchair philosophers" and the "myopic scientists." There is urgent need for quantitative research, in larger quantity and employing more refined and careful technical methods and along a wide front it is not necessary that all of us be able to understand all its most intricate technicalities, much less that all of us be able to engage in it. Such a position implies a sloppy and inaccurate concept of democracy. Nor is it necessary that all research be confined to tabulations, frequencies, means, medians, zero order correlation coefficients, quartiles and simple graphs. It is not even desirable that in many problems these methods be employed except incidentally. They do not carry far enough. Conclusions based upon such simple methods are extremely likely in many problems to be wholly misleading. No one need build up an inferiority complex, rationalizations and defence antagonisms because he cannot do or understand the more technical methods. Teachers and administrators need not also be technical researchers, nor need all college professors of education. Nor, failing that, need they participate in an opposition.

Technical research workers should not fail to see and appreciate the logic of the need for the type of study of educational problems demanded by Professor Briggs. It is not wisdom for them to shut their eyes to the need of sweeping redirection of secondary education. It would seem obvious to the student of secondary education who is able to free himself from the entangling mass of undergrowth with its firm roots in tradition and vested educational interests and in the supposed need of a small percentage of the population in past generations, that secondary education of today is inexcusably out of adjustment to conditions and problems of the present. It must seem to such a one that, with the exception of a small percentage of schools, notably the more progressive independent schools—those which worship least at the altar of an imaginary college preparation—the programs of secondary schools constitute a pitiful gesture in the direction of preparing young people to solve the more important problems of their own generation.

It is trite but true and pertinent to

observe that the glory of Greece came and expired; that Rome stalked across the scenes in majestic leadership and sank to the depths of a Mussolini dictatorship, that China in ancient times, and Spain latterly, had their heyday and passed on. Northwestern and Central Europe and the English-speaking people of North America occupy today the positions of leadership, of culture, of freedom from want, violence, and pestilence. It is only natural that a strong suspicion should shoot through our consciousness that we may be at the critical point of another cycle. It seems possible that progress is so controlled by the momentum of present tendencies in a social order so complex and huge that we have no choice but to coast on to chaos or despair as exists in lands where world-wide leadership once dwelt. If our democratic forms of government, the security of home, person and property, cooperative industrial organization and effective culture are to survive the greatly aggravated conditions which threaten them in the way of unemployed millions in cities, hungry millions on farms, demagogery, dishonest government and exploitation in politics, the flourishing of crime accelerated and nourished by the automobile and other mechanical inventions and by the breakdown of law enforcement and the sinking of tastes to the low and sensual levels—new generations with new ideals, new attitudes and new insights must appear on the scene. Sophisticated selfishness, bookish intellectualism, childlike materialism, and worship of personal information and power must surrender the focus of attention and values to social idealism, human intellectualism, and personal and social fairmindedness and good will.

The past hundred years have unloosed upon us a scientific and industrial development while bringing longer and more healthful lives as well as the possibilities for universal abundance of food, shelter, clothing, transportation, and luxuries of life to an extent never before dreamed of, has faced us with gigantic problems of social control. It remains to be seen whether the great lag of social and spiritual development behind material and scientific progress can be reduced before irreparable damage is done. By far the most promising agency is the school. The newspapers and churches can be counted on to make only small contributions — the former because they have largely become a part of the juggernaut and the latter because their influence has been so materially lessened. A new type of universal education of youth seems to be the most promising avenue. Professor Briggs will and should be heard. Whether or not his commission with its intriguing possibilities materializes, we face a discouraging problem. Many of us are only dimly aware of its pressure or its importance. It will be fortunate if the voices of Dewey, Briggs, McAndrews and Counts and those of similar vision stir us to face and appreciate reality. May the pens and voices of others who have seen perhaps as well if not as quickly—or as quickly if not as well—the vision and need become active and effective. Fundamental changes in our democracy involving clear vision and keen thinking, come slowly and even more slowly year by year. In the meantime there need be no play-war between "philosophers" and "objectivists."

CURRICULUM DEMANDS ON THE SECONDARY SCHOOLS OF THE FUTURE AFFECTING THE SIZE OF THE LOCAL SCHOOL DISTRICT

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Many school systems are asking whether it is better to have two small high school units, one for the Junior and one for the Senior group, or to combine the two into one Junior-Senior High School. Professor Ferriss points out what seem to be the trends and the reasons for them.

THE curriculum demands on the secondary schools of the future will be determined by the place public secondary education comes to occupy in our gradually evolving conception of the functions of a system of public education suited to the needs of a dynamic democratic society. As to what this place is likely to be can best be forecast, perhaps, by an analysis of some important present trends and of representative conceptions of secondary education as expressed by forward looking educational leaders interpreting secondary education in terms of modern living.

One very important trend in secondary education is the rapidly increasing proportion of our population attending the secondary school. The present century has been noted thus far by an extraordinary increase in this ratio. The secondary school enrollment is no longer the select group of 1900 but has become representative of all economic, occupational, social, and intellectual groups in American society with the trend definitely in the direction of a still more equitable representation. Koos[1] has well described this trend in the statement that our concepts of American secondary education have changed "from those dominated by selective ideals to those which postulate that the opportunities of secondary education should be made available for each citizen according to his needs, capacities, and willingness to make the necessary effort."

A second very important trend in public secondary education is the extension of the secondary-school period to include the old seventh and eighth grades, and the less generally accepted extension upward to include the first two years of college. Considering only the downward extension, the amalgamation of the two upper grades of the old elementary school with the four-year high school has given us a six-year period of secondary education. Statistics show that since 1910 more than 4300 reorganized secondary schools have been developed. In cities, before 1925, the development was in the direction of separate junior and senior high schools. Since that time there has been a very noticeable trend in cities toward the six-year

1 Koos, Leonard V. Trends in American Secondary Education, The Harvard Press, pp. 7-8.

high school, data showing[2] in 1927-28 over 500 such schools with enrollments of over 1,000 each. Gaumnitz[3] states that 47.2 per cent of the high schools of cities, accommodating 49 per cent of the urban pupils, are reorganized schools. Reorganization has naturally been slower in rural and village communities. Statistics for 1925-26 show somewhat over 12 per cent of the rural high schools with reorganizations representing some form of the junior high school idea. Bristow[4] states that 40.7 per cent of the pupils enrolled in the secondary schools of Pennsylvania are in six-year schools. In Indiana there were in 1926-27, 258 six-year high schools practically all being in rural and village communities. This was an increase from 19 to 258 within a period of seven years.

If these two important trends give any index for forecasting the secondary school of the future, particularly in rural and village centers, it seems safe to conclude: (1) that the secondary school of the future will serve practically all children between the ages of 12 to 18, and (2) that the school district will be responsible for a six-year public secondary school training.

Let us next consider the statements of a few educational leaders and their conceptions of public secondary education as a basis for forming some judgment as to the educational responsibility that will probably be placed upon the secondary school of the future.

Dr. Snedden[5] in describing the high school of 1960 writes: "All young persons between twelve and eighteen years of age now attend high schools in the United States. . . . Fairly marked distinctions were formerly made between 'junior' high schools and 'high' or 'senior' high schools. These distinctions have now disappeared. . . .

"Except in certain states which provide separate schools for Negroes and whites, each American high school is open to all persons from twelve to eighteen years of age regardless of native endowments, economic condition of family, religion, sex, or other condition."

P. W. L. Cox[6] expresses his conception of the high school of the future in the following words: "Since the end of the last decade of the nineteenth century forward looking men and women have become more and more conscious of the seriousness of the economic, political and social problems that civilization is facing—problems that must be met and solved. Thus there has been projected an emancipated secondary school, the aims of which are those implied in the aspirations of the democratic movement; that is, they must promote the welfare of society and the adjustment of the individual to society. What is sought is not a traditional culture for all pupils but effective membership in society."

These conceptions of secondary education agree in that all point to a secondary school affording training to all normal adolescents through curricu-

2 N. E. A. Review of Educational Research, School Organization, p. 190.
3 Gaumnitz, W. H. The Smallness of America's Rural High Schools, U. S. Office of Ed. Bul., 1930, No. 13, p. 11.
4 Bristow, W. H. Discussion of the Six-Year High School, Bul. No. 15, Dept. of Secondary School Principals, 1927, pp. 78-85.
5 Snedden, David. American Secondary Schools in 1960, Macmillan Co., pp. 14-15.
6 Cox, P. W. L. Curriculum Adjustment in the Secondary School, Lippincott, pp. 3-4.

lum materials representative of all important groups of contemporary human interests and activities, and adapted to individual differences in abilities, interests and purposes.

The present high schools primarily serving children of rural areas and village centers are small schools. With all high schools offering less than four years of work excluded, the regular four-year high schools[7] have a median enrollment of about 65 pupils each. While only 9.5 per cent of these schools have enrollments over 150, 34 per cent have enrollments of 50 or fewer pupils. These schools represent 70 per cent of all rural high schools. While considerable emphasis has been given to the fact that these schools show a greater holding power than city high schools, there are several things to be considered before one concludes that they are therefore schools affording superior educational opportunities. In the first place, generally speaking, the rural child who wishes some secondary-school training has only the high school available while the city child usually has available several types of schools of secondary grade. In the second place, at the present time, a much smaller percentage of the rural population of high-school age enters high school than of the city population of similar age. While the present rural high school has a slight advantage over the urban high school in its retention of pupils once they enter, it is for some reason greatly inferior in its power to attract the children who have completed the work of the elementary school.

One factor, though there are undoubtedly others, that may operate to reduce the power of the present rural high school to attract children of secondary-school age is the relative narrowness of its curriculum offerings. All studies dealing with the problem have shown that rural high schools as a class, especially those with fewer than 75 pupils, offer a limited program of academic college preparatory type with little provision in their offerings in the way of suitable material for the other important groups of pupils with different types of abilities and different interests and life objectives. As Ashbaugh[8] writes: "A high school in every school district is probably a mistaken ideal so long as we have school districts with such small numbers of children. A rich curriculum, experienced teachers, and opportunities for social education which are possible with larger numbers are conspicuously absent in fully one-half of these schools." Evidence indicates that the widest and most adequate curriculum offerings of rural high schools are at present to be found in California where these schools as a class are much larger than those of any other state.

With the cost of education rapidly increasing the relative costs of secondary education in schools of different sizes has received considerable attention. Studies of cost all agree that in small high schools today, even with their inadequate curriculum offerings, the cost per pupil is relatively very high. They are not providing with reasonable economy even the present

7 Gaumnitz, W. H. The Smallness of America's Rural High Schools, p. 50.
8 Ashbaugh, E. J. A High School in Every School District Means Too Many Small High Schools. School Life, 14: 133-135, 138. March, 1929.

limited program. Hunt[9] found in his study of the Cost and Support of Secondary Schools in the State of New York that the median per pupil cost based on average daily attendance was extremely high in high schools with 25 pupils or fewer, very high in schools with 26 to 75 pupils, moderately high in schools with enrollments of 76 to 200, and lowest for schools enrolling from 201 to 350 pupils. Combs[10] in a study of the efficiency of the high schools of Virginia in relation to size found a gradation of cost per pupil similar to that found by Hunt for New York state though the cost in every case was lower.

With the inadequacies of the curriculum offerings of the small high school and its relatively high per pupil cost in mind, we are in position to consider the curriculum demands upon the secondary school of the future and their effect upon the size of the secondary school district. In working out in a concrete form the curriculum implications of the trends in secondary education and the forward-looking theory of secondary education presented, there are, it would appear, at least three major points of view from which the curriculum problem may be attacked: (1) the social inheritance point of view; (2) the psychological point of view; and (3) the social point of view. Let us look at the implications of each of these briefly with reference to the types of curriculum materials and activities that should be included in the curriculum offerings of the secondary school of the future.

From the social inheritance point of view, if the secondary school is to be responsible for the education of all children of adolescent age through educative experiences suited to the needs of individual growth and social adjustment, its program of studies will necessarily include materials representative of all the important classes of achievement in human interests and affairs. Accordingly, it would seem clear that the secondary school would need to offer educational opportunities in those educational experiences which promote an introduction to and development with reference to:

(1) The scientific method of viewing natural forces and phenomena and acquiring an intelligent understanding and appreciation of their nature and control. This would include the wide range and variety of science.

(2) The mathematical way of looking at the world and the mathematical method of solving problems in the natural and social environment. This would include appropriate materials from each of the major fields of mathematics.

(3) The historical outlook and conception of change and development, particularly of our political, civic, social, and industrial institutions and their place in civilized society and the changes they have undergone and are undergoing in their adjustment to meet changing human needs.

(4) The manner and method of expressing thought, feeling, and achievement and the interpretation of thought, feeling and achievement. This would include languages and literatures.

(5) The artistic expression of meaning and feeling in objective terms.

[9] Hunt, Charles W. The Cost and Support of Secondary Schools in the State of New York, 1924.
[10] Combs, M. L. Efficiency in Relation to Size of High Schools, 1928.

This would include the wide fields of fine arts and music.

(6) The everyday performances requiring coordination of mind and muscle. This would include the manual and domestic arts and the consideration of the world of occupations.

Looked at from the psychological point of view, the secondary school of the future to meet the development needs of the individual will of necessity offer educative materials representing the various types of learning activities essential to a rich and well-rounded growth. From this point of view the curriculums of the secondary school should include at least the following types of materials:

(1) Those curriculum elements primarily affording opportunitity for broad intellectual growth through materials and problems related to and growing out of the great common human interests and affairs.

(2) Those materials and activities primarily affording emotional development and refinement, as the literatures, music, and the other fine arts.

(3) Those materials and activities promotive of the common physical skills and the coordination of mind and muscle. In this group of materials comes the wide range of manual and domestic arts, some aspects of the fine arts and music, and physical games.

(4) Those materials and activities promotive of group consideration and understanding, as some phases of the social sciences, educative clubs and other extra-class activities, and pupil participation in the government and control of the school.

(5) Those materials and activities promotive of health and physical development, as hygiene, sanitation, certain phases of science, and physical games and exercises.

From the social point of view, the secondary school will necessarily include in its program of studies curriculum materials and activities suited to the needs of the adolescent child and possessing high values in promoting objectives representative of each and all of the major desirable groups of human activities and interests. This point of view may be represented by the Cardinal Principles of Secondary Education or some other equally broad and inclusive analysis of human activities and interests.

In general there is agreement in the curriculum demands implied in these three points of view, but each tends to act as a check and balance upon each of the others in the evaluation of educative materials and activities in terms of individual and social adjustment. Each and all will require a curriculum range and organization paralleling the broad groups of human achievement and interests to the extent that materials from these can be adapted to the abilities and interests of adolescents 12 to 18 years of age. The main help of the secondary school of the future in determining its objectives and the curriculum demands will undoubtedly be found in the psychological and social approaches. The former will serve to emphasize the interests, capacities and needs of youth and guarantee to them their just rights and the latter will emphasize the needs of society and the demands of social adjustment.

Let us now consider the implications of these approaches, particularly the psychological and social, with ref-

erence to the subject-matter fields to be recognized in the program of studies of the six-year secondary school of the future. While the organization of individual courses will differ gradually as progress is made from the first period of three years to the second period of three years, the range will be practically the same for the junior and senior periods. Because of emphasis upon exploration and try-out in the first cycle, the organization in those years within subject-matter fields will be extensive, and in the second cycle, to meet the demands of differentiation, the organization will be characterized by an increasing degree of intensity and specialization. Trends in methods of teaching and the organization of instruction units indicate that in the secondary school of the future instruction will be more individualized and that instruction units will be smaller and be organized with specific reference to definite educational objectives. Since these trends will probably not change to any great extent the total range, variety, and amount of curriculum materials making up the whole of the program of studies, it seems safe to forecast the curriculum demands upon the school of the future, at least with a reasonable degree of accuracy, in terms of existing subjects and subject-matter fields.

Following the above assumption, we shall venture to predict the large groups of learning materials that will be needed. The following subject-matter fields would appear to represent the minimum number through which could be met the demands implied in the types of learning involved and the major groups of human interests and activities calling for consideration.

(1) English language and literature, with primary emphasis upon the common needs of expression and interpretation and promotive of desirable emotional development and refinement useful in the expression and interpretation of beauty through language.

(2) Foreign language, a minimum of at least one for those adolescents with linguistic ability and interests.

(3) Science, including earth geography, affording a broad introduction to science and differentiated courses representing the major fields of science.

(4) Social and economic science, including cultural, political, and industrial geography.

(5) History, with emphasis upon the major lines of civic, agricultural, industrial, intellectual, political, and artistic progress and achievement.

(6) Mental science, including mental hygiene.

(7) Mathematics, with emphasis upon those phases and fields of mathematics most widely useful in developing an understanding of the quantitative characteristics and relationships of one's environment and the mathematical methods of solving and representing common life problems.

(8) Fine arts, representing all means and methods of portraying in objective form meanings and feeling.

(9) Music.

(10) Manual arts, including agricultural arts, at least in rural communities.

(11) Domestic arts, including all major groups of arts pertaining to homemaking and beautification.

(12) Guidance and educational and occupational orientation.

(13) Health and physical education, including all materials and activities needed in promoting and maintaining individual and social health.

(14) Three vocational cores of subject matter in the senior period to the extent of a minimum three year-units each and determined with reference to the major vocational training needs of the secondary-school district.

In the junior period of the secondary school, giving adequate opportunity for exploration and try-out experiences, all the subject-matter groups, with the exception of the vocational and possibly mental science will need to be represented in the curriculum offerings. Because of organization on the basis of extensity it may be possible to combine the history and social science groups and the fine arts and music groups, thus reducing these four groups during the exploratory period to two. This would reduce the curriculum groups necessary in the junior period to ten.

On the basis of the proposed subject-matter groups, the minimum number, excluding the vocational materials, meeting the curriculum demands of the senior period would be thirteen. All of these, with the possible exception of mental science, health and physical education, and guidance and educational and vocational orientation, should provide opportunity for study to the extent of a major sequence. Thus there would be a total of ten major sequence groups of studies needed in the senior period. If the three vocational sequences are included, the number of major sequence groups in the senior period is increased to thirteen. While the trend is toward a six-year secondary school reserved for general education, it seems probable that for at least the next fifty years the secondary school, if it is to meet the needs of all groups of adolescents, will be required to offer vocational training. By that time it may be desirable and possible to delay all vocational training beyond the age of eighteen.

Thus it seems conservative to estimate that the number of *year-units* of study necessary in the junior period will average two for each of the ten subject-matter groups, making the minimum of twenty *year-units* in the junior period. Omitting the vocational groups, the senior period, to afford major sequences in each of its ten groups, would need to offer thirty year-units of study. Estimating four year-units as meeting the requirements for the three non-major groups we would have thirty-four year-units. Including the three vocational sequences, the total curriculum offerings of the senior period would thus become forty-three year-units of study or approximately the number offered in the rural high schools of California at the present time. For the junior and senior periods together the total number of year-units in the program of studies would be fifty-four or sixty-three, depending upon whether or not the nine *year-units* of vocational materials were included.

Estimating the amount of reduction in number of courses offered at any one time, through individualized independent study, alternation of subjects and other devices, as possible to the extent of one-fifth of the total number of year-units in the program, we would

have forty-three, not counting the vocational courses, or fifty-one including them, as the total number of different courses to be offered in any one term or year. On the basis of 25 periods of instruction a week as the standard load for a secondary-school teacher, the secondary school of the future, meeting adequately the curriculum demands of its regularly enrolled pupils would require a minimum teaching staff of nine to twelve persons exclusive of the principal. If we include demands, according to the implications of present trends, in pupil guidance and personnel work, in the direction and supervision of extra-class activities and the pupils' social life, and in educational service to the adult population of the secondary-school district, the staff of instruction will need to be larger than the figure suggested. It seems certain that the secondary school of the future will do increasingly more in meeting the first two demands, and very probable that there will be considerable extension in its educational service to adults. It is also almost certain that the library services, including instruction in the use of library facilities, will demand a full-time trained librarian. Thus a conservative estimate of the demands in the way of staff for performing these duties would be four to five persons. It would thus appear that the secondary school of the future should have a staff of at least twelve to eighteen persons, excluding the principal.

The next problem that faces us in considering the curriculum demands on the secondary schools of the future affecting the size of the local school district is: What size should the school be in terms of its pupil enrollment to render the desirable services and to make the maintenance of a staff such as seems necessary reasonably economical? For all high schools in the United States in 1925-26 the pupil-teacher ratio was 23 to 1. This ratio was the result obtained from computing the ratio for all high schools including the largest city high schools. On the basis of this figure it would seem that a fair standard pupil-teacher ratio for the smaller high schools should lie somewhere between 20 to 25 to 1. Assuming a teaching staff of twelve and a ratio of 20 to 1, we would have desirable a pupil enrollment of 240 in the six-year secondary school. On the basis of a pupil-teacher ratio of 25 to 1, the pupil enrollment desirable would be increased to 300. With a staff of 16 teachers the pupil enrollments desirable according to the two ratios would be respectively 320 and 400. Hence we are led to conclude that the six-year secondary school of the future, to meet its curriculum demands adequately and with reasonable economy, should have a pupil enrollment of at least 250 to 400. On the basis of these estimates it seems sound to forecast that the curriculum demands upon the secondary schools of the future will be such as to emphasize the need of secondary-school districts in rural and village communities much larger than those existing at present, districts capable of providing 250 to 400 children between the ages of twelve and eighteen.

SELECTING SUBJECTS FOR IMPROMPTU TALKS

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The great wealth of material that may be included in impromptu talks will be a revelation to those who have not considered the value of extemporaneous talks as part of the educational program.

WE feel no need of arguing in favor of the extemporaneous speech as a means of increasing mental activity and engendering alertness in a class. Teachers who have seen the self-reliance, attentiveness, and dexterity of thought resulting from intelligent practice of this sort, and how readily these skills may be developed and strengthened into habits, need no urging to its employment. Not only does the procedure leave the memory free to recall ideas only; other mental faculties are permitted unhampered action.

In *Catholic Educational Review* (25: 99ff., February, 1927), we outlined and developed with specific examples how to tackle impromptu talking—actually thinking on your feet. The gist of the suggestions was: (1) State your proposition as an assertion with reasons. For instance, a student drew a card bearing the subject "Newspapers should not be permitted to print details of crime." He proceeded (1) "Newspapers should be permitted to print details of crime, in order to warn against such acts." (2) He cited a recent suicide at —— University (a case by which we had all been shocked), a student who had "sucked pleasure dry," filled his brief case with bricks, tied it around his neck, and drowned himself. (3) To be sure, he continued, there is in crime news for a certain type of mind the encouragement to try a "perfect crime," such as the Leopold-Loeb murder. (4) While that horror would seem to argue against the printing of details, nevertheless he believed that they should be printed but written in such a way as not to inflame the imagination. The point was clarified by comparing Stevenson's use of "gobs of blood" in *Treasure Island* with the irresponsible writing of the authors of Buffalo Bill exploits, the James Boys as train robbers, and so on.

Another example will emphasize the necessity of defining terms, if there is any ambiguity about those used. Suppose a student found his subject to be: Who does more for the world, the man of deeds or the man of words? Here it would seem that one must make clear what he means by a man of action and a man of words.

Were a student to choose the man of action as the more potent, he might cite Alexander the Great, Columbus, Robin Hood, Kit Carson, Henry Ford, Colonel Lindbergh, or even Mohammed, who tried to force his religion on people by the sword. Certainly one must be aggressive, since defensive tactics alone never won a

contest. (Prepare against the citation of Ghandi in contradiction.) The affirmative attitude of meeting emergencies as they arise makes one resourceful, and so forth.

On the other hand, however, what one is often speaks so loudly that it is unnecessary for him to speak, or one cannot hear what he says. Jesus was surely a man of peace although the Temple shows him (like His teaching method) the ideal combination. When teaching He always (1) told a story, about people (to make it specific), and (2) illustrated it through action (parable). Because He (a) attracted attention to what He intended doing, then (b) did it, and then (c) explained it, His parables are more true than any assembling of mere facts (which may be twisted into falsehood).

To illustrate our proposition from the obverse, though, we might declare that the man of words speaks last. He gives the impression that endures. He records what otherwise would be lost to history. He immortalizes the man of action, who if he were not written about would be forgotten.

We conduct the class in this way. When the student enters the room, he takes a card from the pile on the instructor's desk. (This plan is of particular advantage if students are slow about getting to class.) The cards may be handed out when the class has assembled, of course. In either case, the student has a few minutes of preparation before he must appear. We aim to train them into planning the development of their speeches before they say a word. With the first and second topics in mind they push on to an effective conclusion.

Because the type of audience differs, there can be no adamantine formula for procedure; but we can establish principles. With the right mental attitude (which always comes first), there is a strategic point of attack, dependent on the kind of people one faces. (Amplified in *Catholic Educational Review,* 24: 478 ff., October, 1926.) The speaker neither apologizes nor talks about himself, although with the topic "Is study of a distasteful school subject ever beneficial?" one can best illustrate, probably, from his own experience. (1) He marshals what he knows about the subject, (2) subtracts what the audience may be familiar with, and (3) has remaining what he may contribute.

He aims definitely to get into their experience immediately, corrals their attention, and arouses their sympathy. He avoids speaking so rapidly as to blur impressions, delivers slowly the ideas difficult to comprehend (deleting any material he cannot make absolutely clear), goes over rapidly what his listeners anticipate, and sticks to his point throughout.

Concentration is his keynote. Three subheads for the main proposition are sufficient, for no one talks well who talks long (or as they put it in tire factories, the longer the spoke, the bigger the tire).

For practice in limiting the subject, for variety in assignment, one might give out nouns, such as fire, water, war, and so on; by the time each student has been assigned a word, the first assigned must be ready to talk.

In selecting subjects, one must keep within the limits of the students' expe-

rience, using only ideas they may be expected to be familiar with. Topics of current campus discussion are sure to draw fire. For instance, if there is rumor of banning attendance at a decent, popular dance hall in the city near the school, "Dancing at the Palais Royale should be prohibited" will be a good subject on which no preparation will be needed. The matter of parental allowances of money to students was proposed for discussion when a youth (whose father allowed him exactly what the youth's grandfather allowed the father when he was in school) paid more for his room and board than his allowance permitted. (All students do not live on Campus because of lack of room.) He got a job, borrowed money, lost the job, and was in a serious predicament. Whose the fault?

To give students a choice (it is amazing all the subjects we know little or nothing about nowadays), many of our cards contain two topics. For instance:

Will electricity ever replace steam?

or

The half-nelson hold in wrestling?

The difficulty with such a combination (aside from its encouraging an indecision complex) lies in the ludricous error of a student who does not recognize them as two different subjects. To hear both read as one is to have a near-riot on one's hands. However, we have found the giving of a choice a good idea. Three by five cards list the two topics on separate lines.

Subjects we have used are: Hard work is necessary for the development of character (or) How to make the strokes in tennis; Will there always be a great number of poorly educated people to do the manual labor of the world? (or) Indoor baseball is a better sport than basketball; Should strap-hangers pay less fare? (or) How to correct the readings of a compass; Why do people wear hats? (or) The relation between deforestation and floods; Dances should be given on the Campus (or) The different kinds of arches; Smoking on the streetcars should be prohibited (or) How the earth acts as a magnet; Is co-education beneficial to the student? (or) The principle of the electric motor; Do we read enough works of fiction? (or) The horse will never be entirely supplanted by the motor; The pin is more useful than the match (or) How to brace a fence post; A vegetarian diet is better than one containing meat (or) How the gyroscope works; The ladybug is more useful than the spider (or) The principle of the silo; How the siphon works (or) Trigonometry should be taught in all high schools; What is the cure for the large number of automobile accidents? (or) How to carve wood; Would the American labor force be more efficient without the immigrant? (or) Tipping should be abolished; Should a father watch his son to prevent his smoking? (or) How the blade of a mowing machine works; Are parents responsible for child labor? (or) To read the comic pages of the newspaper is not worth while; Which party should win the next presidential election? (or) In all ordinary cases a man should give his seat in a street car to a woman; A student should earn his own spending money (or) How a water wheel works; Have you any objection to eating cold storage eggs? (or) How a street is paved; The high jump is

the most scientific of field events (or) How the oil cup works; What gains have been made by soil analysis? (or) The kind of play I appreciate most in a baseball game; Final examinations should be abolished (or) How an electric switch works; Is a street more attractive with buildings of uniform design? (or) The ..... automobile is the best for the price.

Do you think scientists will ever learn to control the weather? (or) Students should be required to wear uniforms; Which would be the most interesting American city to see? (or) Plumbing should be taught in this school; Should you like to see South America? Why? (or) How to show the composition of light; How can poverty be prevented? (or) How an electric stove works; What makes a good salesman (or) The different kinds of aeroplanes; What is the cure for war? (or) The potato is more ornamental than the tomato; Does war help indirectly in making a lasting peace possible? (or) How the block system works; What is the advantage to be gained from studying good music? (or) In time the United States will control all North America; What kind of pictures do you like? (or) How to make the notes on a cornet, clarinet, violin, or zither; Will Mexico ever be a real republic? (or) Students should be limited to an eight-hour day; Country boys should stay in the country (or) How a valve works; The honor system should be used in all examinations (or) How to spin the diabolo; Do you approve of fashionable weddings? (or) How to mix colors to produce certain shades or tints; Economics should be taught in high school (or) How piano keys produce sounds; Cooking by gas is preferable to cooking by electricity (or) How a car controller works.

"How to feather oars" represents a type of title most students fail to grasp. If one lives in a part of the country in which there is no boating, that use of "feather" is beyond student experience.

Another type of choice-card reads: Monopolies are seldom (are often) beneficial to consumers; another, Shall pitching pennies on the Campus be prohibited? All forms of gambling?

To test whether there is any value in stating either one or both of the topics on a choice-card in the form of question, we might make both statements and inquire. The United States should dominate the Pacific (or) How to show that a fire needs oxygen; The fundamental interests of capital and labor are the same (or) How the stereoscope works; Women should not be permitted to drive automobiles (or) How books are bound; Co-education in high school should be abolished (or) How to take a time exposure picture; Government employees should be allowed to organize and strike (or) The principle of the microscope; The different strokes used in fencing (or swimming) (or) The United States will never have complete prohibition. On these cards, there is no need to use the "or." The topics may be written on different lines and numbered (1) and (2).

Another laugh greeted a student's reading as one subject: Success in life is measured by financial standing (or) Plaster of Paris.

Among single subjects each on a separate card we list: How to splice a rope, Washington was a greater man

than Lincoln, The amount of property that may be inherited should be limited by law, How a jury is chosen, New Orleans will some day be a greater shipping port than New York, It is better to fit yourself to the job than it is to find the job for which you are suited, How to train a dog, The purpose of prisons is best served by making the inmates comfortable rather than uncomfortable, The locomotive with the cab in front is better than the present pattern, Owners of vacant lots should be required to keep them free from weeds, The right of suffrage should be granted only after an educational test, The training of American boys in military tactics is against the best interests of the nation.

A representative should vote as his conscience dictates and not as his constituents desire, Novels are more effective than sermons as teachers of morality, Freedom is by no means an unmixed blessing, Well-written books are sometimes extremely tedious, The common notion of success is fallacious, Provision should be made for voting by mail, The products of prison labor should not be sold, American railways should be operated by electricity, It is better for a city to build subways than elevated railways, The price of wheat (or of all cereals) should be standard (set between limits not far removed), City employees should have a weekly half holiday, Labor organizations promote the best interests of the working man, How the customs duties are collected, Explain the organization of the Steel Trust, There should be a minimum age for the drivers of automobiles, Internal enemies are more dangerous to our country than external enemies, Hypnotic entertainments should not be allowed, States should provide a penalty for persons who continually fail to vote, Loyalty to one's country is of more importance than loyalty to humanity at large.

The advantages of farming as an occupation, How to develop a film, The administration should include representation of employee and employer, How the rural mail route helps the farmer, The internal structure of the Pyramids, If any nation violates an international agreement, it is the duty of the United States to demand an accounting, How a president is elected, The city government should provide work for the unemployed, The advantages of living in the Temperate Zone, The study of ..... is more difficult than the study of ....., The college man should utilize his vacations as try-out periods in the vocations he has tentatively selected, All lobbyists in the state legislature should be required to register their purpose and the source of their support, You are reasonably wise in ending indecision by following the career your father pursued, The honor system of conducting examinations is practicable only in smaller schools, A college education is of greater advantage to the business man than the same amount of time spent in business experience.

All talks need not be developed according to our formula. If, for example, a student approaches "The right of the American working man to vote is more important than the right to strike" with the idea of proving "The working man has no right to strike" by elimination, his attempt is to be commended. Instead of beginning with the statement of a proposition ("The United States should not

provide for the military training of school boys"), there is value at times in not revealing one's position on the subject immediately and impressing the audience by so doing, or holding their attention until ready to reveal one's stand, near the end of the talk.

General topics (to be limited) might include: Business openings in South America, The legality of capital punishment, The value of an immigrant, Stamp collecting, Utopia, The advantages of country life, The value of marsh lands, Railway accidents, One of the best magazines I know (Why do you consider it among the best?), Material possessions, A short life in the saddle is better than a long life by the fire, The difference between justice and law, An irresistible force would be stopped by an immovable body.

The same subject may be stated differently on different cards. (This procedure might be followed if it was felt that the student did not treat the topic fully or that it would stand up under further discussion.) "This school should have an all-freshman and an all-sophomore year" might appear again as "Credits in all colleges on the Campus should be interchangeable during the first two years," or again as "Students should be given their first two years in college to decide what they intend to specialize in." "Should a man's immorality in private life be held against him in business relations?" might appear again as "Would you recommend for a position an expert engineer with whom the women of the community would not be safe?"

Students may be moved to speech by a question. What evils have arisen from Prohibition? Is the boycott spirit a good one? As a smoker, do you really enjoy smoking, or is it a habit you cannot break? What are the prospects for world peace? Have modern inventions made people happier? Should the inmates of the county jail be forced to do manual labor? What is the value of the weather forecasts? Should people be punished for throwing refuse into the streets? Who should hold the upper hand, the union or the employer? Should we attend moving picture shows often? Should one refuse to be thirteenth at the table? What is a Trust? Should every state have a Baumes Law for repeating offenders? What constitutes a living wage? Should there be a property qualification for voters? How can insanity in the United States be lessened? If you were going to Europe, would you make it a pleasure or a study trip? Is manual training an adequate substitute for athletics? Would you rather spend your vacation motoring, cruising, or hiking? What is the race problem? Ought poor farms be made attractive?

Problems from school life make good topics for impromptu talks. We had, for instance, a maximum number of "cuts" (absences from class). For that reason "The maximum number of 'cuts' should be increased" made lively talk. Other topics of interest for the same reason included: Should a good athlete be debarred from representing the school in athletic contests because of low scholarship? Is it ever beneficial to go to college for but one year? Review Math should be put in the course in engineering on this Campus; Should monograms be

awarded in athletic events for taking first place or for making a certain number of points? How to treat a new book; How shall a student be punished for forging a name on an official document—excuse, permission, and so forth? The school year should be divided into four quarters of twelve weeks each; Each high school should offer a college-preparatory course (which will include all entrance requirements); Elementary Physics should be included in the science course on this Campus; Sawdust is better than sand for jumping pits on the athletic field; The Freshman formal dance should be made an annual event; Student government is a better means by which to prepare pupils for citizenship than are the studies of civics and history; Why we need a new gym.

A student should take only those subjects related to his future work; What this school needs most; Hiring athletes for a University; Books are sometimes better companions than persons; The study of Latin may be as practical for one student as the study of engineering for another; What is the value of a literary society? The giving of prizes for scholarship promotes the best interests of the students; Colleges should offer courses to fit men for public positions; The students should be allowed to pass rules for a standard of student behavior; What is the cause of student suicide? The freshmen of the school should control the other classes; More tennis courts on the Campus should be provided by the school authorities; This college should have a preparatory school; The necktie is a useless ornament; Field events are better for the contestants than races; Princeton University is wise in requiring every student to learn to swim before graduation; What is your idea of a popular student? The college man should progressively assume responsibility for his conduct; Should a person going into business have a college education? How would you penalize a student who submitted as original a paper copied from an old magazine, or one written by another person?

When has an individual a sense of honor? Engineering should be a five-year course; How not to umpire a baseball game; Mistakes in spelling should be punishable by fine and imprisonment; Fraternities should be introduced at this school; How to hunt rabbit; The mental training furnished by baseball is superior to that given by any of the regular studies; This school should be co-educational; The ..... typewriter is the best; How to use a dictionary; Advantages of living on or off Campus; Should students be permitted to smoke cigarettes on the Quadrangle; The traffic problem in this city is not handled efficiently; The officers for all classes except freshman should be elected in the fall; The U. S. Government should adopt the metric system.

Even when subjects are as closely related as the three that follow, they should be listed on different cards which may be kept together so that when the three topics have been treated a fourth speech may, by way of summary, treat the three: Should a student be asked to report another (a) for cheating in the preparation of class work or in examinations? (b) for damaging school property—

defacing walls, seats, and so forth? (c) for stealing?

The list for possibilities for subjects seems endless. At the close of several chapters in our text there are numerous suggestions that may readily be converted into speech material. At the end of the discussion of choosing a career and of habit, especially, we got such topics as: Never break spiritual training, Most persons are too weak to use practical methods for forming habits, and It is well to publish your intentions of forming a good habit. Students have been rewarded by going through current magazines to find titles they would suggest as subjects for extemporaneous talks they would enjoy hearing.

We might mention in closing an amusing experience with a Chilean who pretended he could speak no English. Because outside the classroom he made an attempt to express himself, one of the students proposed that when he himself got up to talk he would use the subject "If you could visit any country you wished, what trip would you take?" We typed such a card and left it near the other pack. The inventive student read the topic and said, "I'd like to visit Chile because I understand the people there are real Indians, wear rings in their noses and feathers in their hair." That was as far as he got. The Chilean rose to his feet and enlightened ignorance extemporaneously. Thereafter he could no longer pretend inability to contribute.

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PROFESSOR OF BIOLOGY IN MARQUETTE UNIVERSITY
GUEST-LECTURER TO THE NATIONAL UNIVERSITIES AND LEARNED SOCIETIES OF THE LEADING SOUTH AMERICAN COUNTRIES, 1927

A university where the president is elected by the faculty and subject to their instructions, where a professor is selected by means of an examination and removed only on petition of the faculty of his own college, presents a picture so contrary to the American plan of concentrating all authority in a president and lay board of trustees that one's curiosity is at once aroused as to how well it works.

AN understanding of the organization of the second-oldest university in the New World—The National University of Cordoba in the Argentine—should not only prove of interest to University men and women of North America, but such an understanding should also help to make it possible for North and South American students to orient themselves the better when studying away from home.

All Latin American Universities have followed somewhat similar paths of development so that a thorough understanding of one definite National University would seem to be preferable to a detailed account of the small variations one finds between those of the different Republics.

The National University of Cordoba, founded in 1613 (although its doors did not open to students until the following year) is only exceeded in age by one other university in any

of the Americas — the University of San Marcus at Lima, Peru, founded in 1551.* I have chosen the University of Cordoba as my example because it was a North American, Benjamin Althorp Gould (1824-1896), the astronomer, who played a not insignificant part in Cordoba's scientific development. It was he who opened the National Observatory of Cordoba —the only Observatory in the world busying itself primarily with the mapping of the entire heavens of the Southern Hemisphere.

A short history of the University of Cordoba will illustrate better than one could illustrate in any other way the vicissitudes through which Latin American Universities have had to pass.

Founded in 1613 by the Jesuits as the college of Saint Francis Xavier, it soon became the *Colegio Maximo* of the Jesuit Province of La Plata. With the expulsion of the Jesuits in 1767, the University was handed over to the Franciscans. In 1800 a Royal Charter fixed the name of the University as the Royal University of San Carlos and of Our Lady of Monserrat. A preparatory college of the latter name had had, for a long time, the same rector for its head as had the University, and this preparatory college had been controlled by the University. Seven years later the University was secularized.

In 1662, the first American-born head of the Franciscan Order—Fernando Trejo y Sanabria, then Bishop of Tucuman, left his entire fortune for the establishment of a true University in Cordoba to be under the care of the Jesuits, and six years later Gregory XV, then pope, raised the erstwhile college to University rank.

Many governors and several presidents of the Republic were trained in the halls of Argentina's oldest and most famous institution of higher learning. Even that strange tyrant of Paraquay, Gaspar Rodríguez de Francia took his degree in its ancient *Salon de Grados* — the magnificent hall in which all degrees are conferred.

Tyrants of the Republic itself did not leave the University untouched. Ignorant men these, whom revolution and the force of arms had elevated to positions of great power, knew little of the value of the vast treasures contained in the University's library and so many a priceless book was destroyed and lost.

Quite naturally a great seat of learning where the sons of the most distinguished families received their training would feel the various revolutionary changes. Indeed, General José María Paz (1789-1854) a revolutionary leader of merit, holds a position of great respect among students and faculty as the University's most distinguished military alumnus. The city of Cordoba and the precincts of the University now so quiet, certainly seem far removed from the days when actual battles were fought within and close to the city's confines. In 1841 the University even furnished a political martyr in the person of its learned theologian Francisco Solano Cabrera who was there executed. The University's most famous literary man is

* The early Universities of the New World were founded as follows: San Marcus, Lima, Peru, 1551; University of Mexico (but too broken a career to be accepted as the second oldest University), 1553; University of Cordoba, Argentine, 1613; University of Sucre, Bolivia, 1623; Harvard University, 1636; University of Cusco, Peru, 1612; Yale University, 1701; University of Caracas, Venezuela, 1721; University of Havana, Cuba, 1728; University of Santiago, Chile, 1743; University of Quito, Ecuador, 1787.

its one-time Rector, Gregorio Funes (1749-1830).

It was in Cordoba that the first printing press in the Spanish Provinces of the Americas east of the Andes was set up in 1765. The University proper consists of a great structure almost a full city square in extent, substantially constructed and situated on a street bearing the name of its founder, immediately adjacent to the old Jesuit Church with which it was originally connected.

In the center of the patio is a statue of the University's founder, a work of the Italian sculptor, Victor de Pol.

The newer buildings consist of a Medical Building and the National Academy of Sciences—the latter containing the Museum of Natural History and Minerology.

The University now has three Faculties:— that of Law (with a faculty of 51 and 705 students), of Medicine (with a faculty of 46 and 1459 students), and of Engineering (with a faculty of 45 and 87 students). There is also a preparatory college under the supervision of the Faculty of Engineering.

As there is no distinct faculty of Liberal Arts, many students take the regular course in Law or Medicine without really expecting to become practitioners of a profession. The older families of all Latin America want their sons to have a doctorate, preferably in Law, as this is the usual *sine qua non* for political and governmental appointments of the highest rank.

The Organization Proper.

The University Assembly is made up of the Directive Councils of the various Faculties. One more than half the number of members must be present to make such meeting legal in its deliberations. Its duty is to elect a Rector every four years (he may be reelected), and to suspend or cause to resign and to accept such resignation of the Rector for justifiable cause. Such action requires a two-thirds vote of all members present at the meeting called for that purpose. The Rector must ask permission of the Assembly to absent himself from the city for more than sixty days. The Assembly also decides whether new Faculties are to be brought into existence and whether existing ones are to be divided.

The Assembly is convoked by the Superior Council and the object of convocation must be stated, and notice of such convocation be given at least two weeks in advance of said convocation, with another notice to be sent twenty-four hours before the meeting actually takes place.

The Superior Council is made up of the Rector, the Deans of the various Faculties, and of two elected delegates from each Faculty from among the Professors or Assistant Professors. In case of vacany, and until other delegates are elected, the oldest Professor of a School in point of service, acts as delegate. Delegates are elected for two years and cannot be reelected without an interval of two years elapsing, and no delegate may promise or be asked to bind himself in any way to carry out any particular instructions from the electors.

The Superior Council meets twice a month during the school year and is the highest tribunal of the autonomous University. It convokes the University Assembly. It may make or unmake whatever rules and regulations it deems necessary for the welfare of

the internal regulation of all University matters. It passes on plans and suggestions of the individual Faculties and of the individual Professors. It establishes new Faculties and adjusts the distribution of the University's income. It is the Court of Final Appeal from the decisions of all other University bodies, and its decisions are absolute, subject only to the approval of the Minister of Public Instruction.

It confers honorary degrees. It may offer prizes and pecuniary grants for special scientific or literary effort of the University's professors or students.

It proposes to the Executive Power of the Nation the creation of new Faculties or the division of those already existing, proposals which have, however, been previously approved by the University Assembly. It approves or disapproves of any and all names handed in by the various Faculties to fill any University professorship.

The Superior Council also accepts or rejects the annual report of the Rector, and it alone can accept or reject gifts and legacies made to the University. It must present an annual financial report to the Executive Power.

The Superior Council is also the Court to decide whether any member of the University Faculty or student body has broken University regulations and it is the official interpreter of all University laws and regulations.

It projects and sanctions the expenditures of the budget and it accepts or sets aside any plans for the expenditures for special work not specifically mentioned.

The Rector, having been elected for four years by a simple majority vote of the University Assembly, may be reelected for another term only by a two-thirds vote. For further reelections he must receive the unanimous vote of the Assembly. He must be an Argentine citizen not less than thirty years of age and must possess the highest University degree.

The Rector is the go-between of the University and the Minister of Public Instruction as well as the official University representative in dealing with all scientific organizations and institutions that have official sanction. He is to see that the wishes of the Superior Council are carried out and he is to be the executive who shall act in all emergencies when there is no time to consult the Superior Council. He may be ousted for grave cause or even by absenting himself twenty days without permission. It is he who calls the meetings of the Superior Council and he has the place of honor assigned to him at all University functions. He must carry out all instructions of both Assembly and Superior Council.

The University functions officially only through orders and degrees bearing his signature.

The Rector is the true executive of the University. He is to watch all expenditures and to see that they are made for the purposes stated. He is to see that all University property is maintained in good order, and to do whatever is needed in the way he thinks best whenever specific instructions have not been given.

The Faculties (we should be inclined to use the term Colleges in the United States) each have as their governing body, a Directive Council, headed by the Dean. The Directive Council is composed of fourteen mem-

bers, including the Dean, eight of whom must be full Professors of the particular Faculty. It is in these Directive Councils that Latin American Universities differ most widely from those of our own land.

The Directive Council has eight members elected from among the full Professors of that Faculty, three from among the Assistant Professors and three from among the regular students who have completed at least one full year's work and who have passed a satisfactory examination.

Formerly the students elected four delegates, the Assistant Professors four, and the full Professors six, so that the Assistant Professors and the Student Delegates could actually cause the ousting of the heads of Departments. It was this possibility which not rarely became an actuality and brought about those student strikes in Latin American Universities which we of the States could never understand.

The members of the Directive Councils are elected for four years, there being an election of one half of them every two years. No delegate may promise or be asked to promise that he will try to fulfill any definite programme. He must be free to vote as he thinks fit at any time. No delegate can be reelected immediately. No Councillor may represent two Faculties at the same time. If, for any reason, a Councillor is disqualified, the oldest ranking Professor takes his place until a new delegate can be elected. In the election of delegates, Professors must receive an absolute majority of those voting, while student delegates need receive but a simple majority. Each delegate must vote on every question presented to the Directive Council or suffer suspension or complete ejection. If any refuse to vote, he may not even be counted as present in the forming of a quorum.

The Directive Council may not divert funds assigned to it for any other purpose than those assigned. The Directive Council meets twice monthly. Any session may be secret if the Councillors deem it best to have it so.

The Directive Council elects its own Dean and Vice-Dean and its own delegates to the Superior Council. The Librarian is under the Council's immediate jurisdiction which can at any moment discharge him. The Directive Council may also discharge Assistant Professors. It must hand in a specific complaint to the Executive Power of the Nation, however, and receive the approbation of the Superior Council before it can discharge a full Professor.

The Directive Council also recommends the advancing of Assistant Professors to full Professorships by sending to the Superior Council the name of such Assistant Professor with all proofs of his competence, academic degrees, and any other credentials it deems important.

It also recommends to the Executive Power of the Nation, through the Superior Council, any change or any exchange of chairs of the full Professors which its members believe will make for more efficient teaching.

The Directive Council also recommends and arranges the courses of studies and takes care of all matters which pertain to teaching detail. It may suspend or expel students. It may even suspend or expel instructors or even Professors for neglect of duty. It recommends to the Superior Council the validating of foreign diplomas and degrees and fixes the rules and

regulations for entry, courses of study, examinations, and conditions of graduation of students from their particular college, and once a year it makes a formal report, through the Dean of the Superior Council, of all its recommendations.

It must send a complete record of all its acts each month to the Superior Council.

Toward the end of the year the Directive Council makes up a list of all projected expenditures for the coming year and it must, at this time, also report to the Superior Council how the previous year's budget has been administered.

It, too, must give the final certification of satisfactory work of the student before the Superior Council and the Rector can confer a diploma or degree.

The Dean is the go-between of the Directive Council and the Superior Council, and is the executive who is to carry out the wishes and decisions of the Directive Council.

The Dean is the president of his Faculty and, like the Rector, must be an Argentine citizen not less than thirty years of age, and in possession of the highest University degree. He is elected for a period of four years and cannot be reelected without an interval elapsing.

The Vice-Dean takes the place of the Dean whenever the latter is absent, and in case of suspension, resignation, or death of the Dean, the Vice-Dean convokes the Directive Council within ten days of such vacancy for the purpose of electing another Dean.

The Dean convokes the Directive Council. Conjointly with the Rector he signs all diplomas and degrees for the student graduates of his particular college. He must report each month to the Directive Council and to the Rector all breaking of University laws and regulations by both instructors and students. He is to carry out the wishes of both the Directive Council and of the Superior Council in so far as these affect his Faculty. He grants excuses to the instructorial staff and to all employees of the University. He employs and discharges subalterns. He also has the final passing upon whether a student has finished his work in a satisfactory manner. He may suspend students for not more than two months. Anything beyond that period of time, must have the approbation of the Directive Council. Any suggestions from individual Professors must come through the Dean to the proper Council, if such suggestions are to be acted upon officially. The Faculty Library is also under the direct charge of the Dean.

Professors are appointed or promoted by having the Directive Council choose three of the best qualified candidates for such appointment or promotion. The candidates must then pass a competitive examination. The only exception to such procedure is that of a very eminent man, whom it would be an honor for the University to number among its Professors. In such case the name may be entered among the ablest three without examination.

Each Faculty passes judgment first as to the fitness of any candidate for any Faculty vacancy and then conducts the competitive examination.

The Directive Council may, however, in case of necessity, appoint any qualified person to fill a vacancy temporarily for one year with a possible extension of the appointment for an additional year, but such appointment

in no way operates toward giving the appointee any favored place in the competitive tests to fill the chair permanently.

The Executive Power of the Nation then appoints one of the three candidates listed by the Directive Council but only after the Superior Council has approved the list of candidates. All Candidates must, however, have served in some instructorial capacity for four years before being eligible to candidacy for an assistant or full Professorship.

No Professor may hold more than two chairs and none may be dismissed except for grave cause. No matter how serious the charges may be against him, no full Professor can be discharged or demoted except by petition of the Faculty to the Executive Power of the Nation and only then after such petition has been approved by the Superior Council. No full professor has ever been discharged.

Revenues

The income of the University varies little from year to year so that the statement of the amount for 1926 will suffice. The Government granted an annual subsidy of $1,175,000.00 (Argentine pesos). To this sum there must be added an income of $362,341.00 (Argentine pesos) from various duties which go to the University officially, and an income of $35,670.00 (Argentine pesos) from the University's endowment. ($227.27 Argentine pesos equal in value $100.00 in American gold currency.)

Publications

The scientific and academic activities of the five Argentine Universities may be gauged by noting that forty-six journals issue from their various departments, on Literary, Historical, Scientific, and Sociological matters.

Authorities

Sobre la Importancia del Testamento de Trejo, by Zemon Bustos, 1901.

La Universidad Nacional de Cordoba, by Manuel E. Rio, Official Publication of the University of Cordoba, 1916.

Universitarios de Cordoba, by Pablo Cabrera, 1916.

Fray Fernando de Trejo y Sanabria, by Jose Liqueno, 1916-1917.

Revista do la Universidad Nacional de Cordoba, by Felix Garzon Maceda, 1920.

Estatutos de la Universidad Nacional de Cordoba, Edicion Official, 1925. All published at Cordoba, Argentina.

YOUR SCHOOLS AND MINE

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***In this department Dr. Woods will answer to the best of his ability any or all questions on educational topics that are addressed either to him at the address above, or to* Education.** ***It is to be understood that the writer alone is responsible for the answers given.*—H. B.**

When should punishments be administered?

I assume that the answer, "When needed," is too facetious. The writer probably meant at what time after the offense should the punishment be administered? In order to get the best reformative effect the punishment must follow close enough to the offense to appear to the pupil as if it was the outcome of the questionable act. It seems clear that individual differences among pupils and chronological ages will cause the exact length of time to vary. Another factor is the mental attitude of the teacher. One should never punish a child while in an angry state of mind. If the offense was particularly of a personal nature, it is best to be a bit slow about punishment. This will insure your "cooling off." In any other condition the punishment amounts to revenge. *Punishment is for reformation not revenge.* (See Morehouse, The Discipline of the School, Ch. X; Smith, Constructive School Discipline.)

I should like some suggestions relative to conducting school exhibits and as to the value I may expect from them.

School exhibits are among the many devices that will aid in bringing closer together the home and the school. Anything that does that is worth time and energy if no other value is found. Then too it is a valuable incentive to better work of all pupils where properly conducted. Obviously this is not by selecting out the best work of the best pupils in an attempt to win a "blue ribbon" for the school at a "fair." Every pupil's best work should be shown. This enables him to profit by his efforts. The writer found it helpful to select a specimen early in the year's work, another about midway, and a third near the close, for the exhibit day. The showing of these three samples in contrast spoke highly of the advance made by the pupils under the guidance of the teachers. Such exhibits will naturally be better placed near the close of the school year. It is possible, however, to have smaller exhibits weekly, even a "continuous" exhibit, where the best work is replaced by better as fast as it is ready.

Such work as hand work in art and other subjects, maps, daily work well done, in fact, anything done by the patrons' children for which the school has been a factor, will appeal to the children. Care must be taken to claim only the credit due the school and thus avoid showing things for which little if any help came from the teacher unless properly labeled as having been

done outside the school. Plan some arrangement so that each child's work will occupy a place where it will be seen and not just be in a pile for his friends to "dig" out. The teacher must not do the work. She can direct, aid, inspire, but the object is not a good exhibit but an exhibit of good work, done by an improving group of pupils. The temptation to do the work in order to get the prize has ruined many an otherwise good exhibit or school fair. Avoid "valuable prizes." The only defensible prize has only honorary value. Stimulate for work well done, not the award. (See Sears, Classroom Organization and Control, pp. 109 ff., or Bennett, School Efficiency, pp. 343 ff.)

What organizations should be permitted to use the school plant? Should a fee be charged?

Any organization of lawful standing, meeting for lawful purposes at a time when it would not interfere with the school's use of the plant, and meeting for a public purpose with no remunerative advantages to the organization, should be permitted the use of the plant free of charge, or with but a nominal charge for the janitorial services, heat and light. This fee should be set and collected by the school, not the janitor. In case an admission charge is made by the organization, the use to be made of the proceeds should determine the fee. If the fee is to be used for charitable purposes the school could well participate to the extent of offering the use of the building. Some publicity and public contacts would be made by the school besides substantial aiding in the enterprise. No organization meeting for illegal purposes, or which would not assume the damages of the meeting to the plant, or meeting at a time which would interfere with the school work, should ever be permitted to use the school plant. There is a possibility that veiled in this question is the one as to whether such organizations, which are questionable to some people, as the Ku Klux Klan, Socialists, religious organizations in certain communities, lodges in other communities, should be permitted the use of the school plant. It would be difficult to rule one out and not another. The same would be true for political parties. If public sentiment is so strongly against an organization that the school will be jeopardized by their use of the plant, the principal or superintendent is justified in refusing them the use of it. Sometimes the requiring of a bond to cover damage to the plant in proportion to the damage done will solve this problem. (See Horn, The Elementary School, pp. 52 ff.)

DEPARTMENT OF BOOK REVIEWS

Teacher's Guidebook to the Activity Program. By *Robert Hill Lane.* New York, Macmillan, 1932, 257 pp.

The author, in this worthwhile little volume, interprets the child-centered school under its newest name, "the activity program." Activity, in the best sense in which that term can be used, should mean self-activity on the part of the child. Such an interpretation of the word links together such writers as Pestilozzi, Colonel Parker, and John Dewey; and it recognizes as the essential part of an activity program the evidence of understanding and purpose on the part of the child.

Here again is the century-old struggle to get meaning into education. Rousseau, Froebel, Pestilozzi, Mann, McMurry, Dewey, and every live superintendent or supervisor anywhere today have one common purpose: namely, to make school work really significant to the child. Historically, various terms have been used: apperception, interest, problem, motivation, project, activity. The term "project" is definitely rejected by this writer as an inadequate term for this larger meaning (page 5). The term "project" is properly applied to vocational undertakings and, when so applied, still has a good meaning. Nor is "the activity program" a well-conceived term. The author shows that the term "unit of work" is a much better term. Thus, by a brief discussion, we are led to accept the idea of "informal program" and "unit of work" as the appropriate terms for describing the type of work in the schoolroom as carried out today in the most progressive schools—a type recognizing the child as the center, and meaning and growth for the child as the significant results.

Having defined the appropriate terms and established the general viewpoint of the modern school, the author proceeds to give plans and illustrations that will help the teacher in replacing the formal, textbook type of school by the better type, child-centered and purposeful. The plans must start with a better program scheme, with longer time periods. The author suggests the following as a basis type scheme:

(1) 9 to 10, the social studies.

(2) 10 to 11, English and related reading.

(3) 11 to 12, physical activities, including music, domestic and manual arts.

(4) 1 to 2, appreciation period, literature, music and art.

(5) 2 to 3, needed training on elementary skills, language, arithmetic, spelling, writing and reading.

This general plan for the program will vary from day to day in any particular schoolroom, according to the requirements of the units under way. Following the development of a general plan, the author, during 150 pages, gives illustrative units with helpful comments thereon.

The final chapter suggests aids to the newer program, such as movable furniture, work benches, work materials, library facilities, including plenty of books at the right vocabulary level, typewriters, maps, pictures, lantern slides, sink with running water, et cetera. A further aid is an understanding teacher with a spirit of helpfulness, insuring entire absence of disciplinary problems.

An appendix supplies helpful references.

The book is well planned, well written, and skilfully managed to lead the teacher into understanding and acceptance of the philosophy and general plan of the child-centered school. It is not a comprehensive treatise on teaching techniques. It is more in the nature of a monograph, presenting sympathetically and helpfully an important development in better teaching.
—Guy M. Wilson, Boston University.

Educating for Citizenship. By *George M. Coe*, Columbia University. Charles Scribner's Sons. 204 pp. $2.00.

I think I have read about all the professional books in this field that have appeared during the past ten or twelve years. And I do not hesitate to say that, in my judgment, this one is, by long odds, the most penetrating, the most challenging, the most inspiring. It is not, by any means, a complete analysis of all perplexities that we must think through before we can think straight concerning this educational problem. Coe would unquestionably be the last man to make any such claim. Nor does it pretend to set down for teachers just what and how to teach. No man can do this in 200 pages. Its value lies in the fact that it slices through to the heart of the problem, and exposes some of the fallacies that characterize much of our present-day theory and practice in this field. The chapter on character education, for example, is grand. Likewise, the chapter on self-government, with all its "actualities and illusions." And the discussion of propaganda versus education should be read, and digested, and fought over by American teachers and school officers of every type and grade. In fact, there is much in the book that can be fought over, to the fighters' profit. The chapter on non-state schools, for example, deals in a forth-right way with one of the most significant issues in statescraft and philosophy, the same issue that Briggs treated a few years ago in his "Great Investment." Those who read Briggs should also read Coe,—and then read others who hold opposing views. Likewise those who have been following the thinking of Harold Rugg, especially as set forth in his "Culture and Education in America," should also read Coe. What a chance for discussion about fundamentals,—concerning which we are all so hazy! Incidentally, I myself would like to learn why Coe writes so optimistically about the "New Social Studies." The intimation is that these are really and truly being reorganized. Are they? I doubt it —though there are promising signs. The book is good, very good. I run counter to all of Coe's philosophy when I say that teachers should be obliged to read it—by law.—JOHN J. MAHONEY, Boston University.

Civic Sociology (Revised Edition). By *Edward Alsworth Ross*, Professor of Sociology, University of Wisconsin. 398 pp. Price $1.80. World Book Co. 1932.

This is a splendid book. It is interestingly written; the selection of topics for consideration is excellent; and the book lends itself to effective teaching.

Professor Ross has made sociology of real civic value in this book, rather than something to theorize about. He has dealt with the real problems of citizenship, and has presented the subject-matter in a form that students can understand and appreciate. However, scholarship has not been neglected, but rather has scholarship been presented in a gripping and understandable style. If democracy is to function better, it means that the citizenry must be informed on and interested in the problems of contemporaneous life. Professor Ross evidently believes this, for in his book he challenges the students to investigate and inform themselves concerning the problems of the present day. The book is divided into three parts; namely: Part I, Trends in American Society; Part II, Major Social Problems; and Part III, Major Civic Problems. Professor Ross does not attempt to relate a multitude of details regarding these problems, although his chapters are replete with pertinent facts, but rather does he stimulate the imagination of the students, so that they desire to explore and find out for themselves through such devices as: (1) questions; (2) topics for classroom discussion; (3) investigations and reports; and (4) debates. At the end of each chapter there is an excellent list of references.

This book approaches and deals with the problems of society and civic life in a scholarly and scientific manner. It is not a "preachy" book. Professor Ross has made the subject of civic life a vital one to the youth. The book is an example of what a good text book should be.—FRANKLIN C. ROBERTS, Boston University.

Class Size in High School English, Methods and Results. By *Dora V. Smith.* 308 pages. 1931. University of Minnesota Press, Minneapolis, Minn. $2.50.

Dr. Smith is assistant professor of education at the University of Minnesota and specialist in secondary school English for the National Survey of Secondary Education. She has had wide experience in actual teaching in both high school and Teachers College, and therefore speaks with authority on this subject. This text is largely the record of an experiment she conducted, for the purpose of ascertaining the effect of size of classes on high school students, and the methods best adapted to classes of various sizes.

A glance at the Table of Contents will indicate the field covered by this interesting and thought-provoking book: The Present Situation in Class Size; Studies of the Effect of Class Size upon Efficiency of Instruction; The Problem and the Procedure; Analysis of Experimental Data; Comparative Progress of Individual Pupils; Student Testimony; A Study of Techniques of Instruction Adapted to Large Groups; Testimony of Teachers and Observers.

The book is amply provided with graphs and statistical data. Fully one-third of the contents is devoted to appendices,—tests devised by the author for various literary and composition units of the experiment, and devices found useful in carrying out the projects. Here may be found many useful hints and suggestions for the high school teacher, such as the section on Suggested Readings on the Age of Chivalry; Pilgrimages; Interesting Stories of the Days of Chivalry (the most complete bibliography on this subject that the writer has yet seen); Composition Topics Suggested by Pupils and Teachers; A Suggested Newspaper Based upon the Events of the Novel (Ivanhoe); a valuable Scott bibliography; True-False tests; tests on social manners and customs as illustrated in Ivanhoe; reading and vocabulary tests; tests on narrative material and on factual material in Ivanhoe; vocabulary tests; all dealing with Scott's novel of this name. Similar suggestions are to be found in the helpful tests on The Merchant of Venice, on poetry, in Library Methods, in Grammar and Punctuation, etc.

A complete bibliography on what has already been done in studies of this sort brings to a close a very accurate, valuable and interesting study. Not only will the English teacher find the book readable and stimulating, but the Superintendent will find in its pages the answers to many perplexing questions. All in all, "Class Size in High School English" seems to the writer to be the most authoritative, as well as the most readable, text on this much-debated subject that he has yet seen. —EVERETT L. GETCHELL, Boston University.

An Orientation in Educational Psychology. *Donald W. Miller.* Richard G. Badger, Publisher, Boston. 234 pp. 1932. $2.00.

This book is a series of seventy "problems" organized under the following headings:

Orientation in the Field of Educational Psychology, 11 problems.

Original or Inherited Nature of Man, 16 problems.

Individual Differences, 11 problems.

Psychology of Learning, 9 problems.

Practical Applications of Mental Hygiene, 23 problems.

Each "problem" is followed by a list of numbered references. The numbers refer to a bibliography of 676 titles at the end of the book. This bibliography makes good use of current periodical references.

Since phases of the field of educational psychology are many and varied, it is quite unlikely that selected treatment of this field by different authors will be similar. Yet, one might seriously question the distribution accorded to the various main topics above, or emphasis upon the various problems under a main topic. Of the 11 problems considered under "Individual Differences," one concerns itself with having students list standardized tests in certain grades or subjects, four deal with statistical measures, and one with the making of a new-type examination.

The reviewer would hardly class the

seventy exercises given as problems. They appear more like a group of questions on a particular topic. Most of them certainly do not present tangible situations for analysis and suggested solution. Mistakes in spelling and typographical errors somewhat mar the copy.

Those teaching educational psychology will find the book helpful in its collected references. Whether to use it or not as a class book is a matter of individual opinion.

W. LINWOOD CHASE
Boston University.

Behaviour Aspects of Child Conduct. *Esther Loring Richards, M. D.* The Macmillan Company, New York. 1932. xv + 299 pp. $2.50.

"I have deliberately avoided entanglement in theoretical concepts of behaviour in the abstract, and have stuck closely to common varieties of childhood misfits as they present themselves to parents, teacher, social worker, probation officer, and practising physician."

It is this sticking to commonness that has enabled Dr. Richards to write such a thoroughly understandable, worthwhile book. Too often mental hygiene has dealt with pleasant and unpleasant theories; too infrequently has its case studies presented children whom all of us might know; too little has such material been readable, workable and possessed of teaching values for its readers. Again, those of us engaged in the educational field have often been made to feel by psychiatrists, psychiatric social workers, and other child clinicians that teachers on the whole know too little, are too academic by nature and training, to be of much service either in diagnosis or re-education. Dr. Richards evidences a firmer belief in us when she writes, "Education is the most open-minded organization of our social system in its eagerness to learn more and grow more. Too often its hands are tied by parental determinations and social conventions. Those of us who work with child and adolescent health can testify that the average teacher and school are open-minded to reasonable suggestions."

Pungent statements, simple and concrete language, and a wealth of human understanding mark this book. We quote:

"Get into the habit of thinking of a child's so-called misbehaviour as misfitting or maladjustment, symptomatic of a wide range of causal factors."

"It is important for those who complain of child or adolescent to cultivate the art of describing what this individual does or says instead of calling him nervous, bad, incorrigible, etc."

This book can be recommended without reservation, which is the highest compliment we can give any book, to elementary and high school teachers and principals, and to those interested in mental hygiene. It is a book that should be in every school library, and is certainly worth buying for the personal professional library.

The only references given in the book come in the body of the text and a few foot-notes. The reviewer wishes that from her rich experience the author might have given a more extended bibliography.

To sum up, we have here a book which —in its treatment of the rôle of behaviour in the field of individual health, common principles of inquiry into children's failure to adjust themselves comfortably to environment, physical handicaps and their relation to child behaviour, school and the intellectual misfit, the importance of habit training during the early years, social conditions as factors in behaviour, play outlets and misdirected child energy, handicaps of constitutional environment, facts and fallacies about fears of childhood, principles in the management of adolescence, and the delinquent,—merits the earnest and careful reading of the teacher who would grow.

W. LINWOOD CHASE
Boston University.

NEW EDUCATIONAL BOOKS

We acknowledge receipt of the following publications of interest to the readers of EDUCATION. Mention here does not preclude review in this or subsequent numbers of EDUCATION.

Secondary Education, Orientation and Program. By *Herbert G. Lull*, Head of the Department of Education and Director of Teacher Training, Kansas State Teachers College, Emporia, Kansas. 1932. W. W. Norton & Company, Inc. 366 pp., cloth.

A Psychological Study of Delinquent and Non-Delinquent Negro Boys. By *Robert P. Daniel, Ph. D.* Bureau of Publications, Teachers College, Columbia University. 1932. Contributions to Education, No. 546. Cloth, $1.50.

The Measurement of Certain Aspects of Personality among Hard of Hearing Adults. By *Henry Hunter Welles, Ph. D.* Bureau of Publications, Teachers College, Columbia University. Contributions to Education, No. 545. $1.50.

State Scholarship Students at Hunter College of the City of New York. By *Adele Bildersee, Ph. D.* Bureau of Publications, Teachers College, Columbia University. Contributions to Education, No. 540. $1.50.

The Educational and Occupational Preferences of College Seniors. By *Marlin Ray Chauncey, Ph. D.* Bureau of Publications, Teachers College, Columbia University. Contributions to Education, No. 533. $1.50.

Propaganda and Education. By *William W. Biddle, Ph. D.* Bureau of Publications, Teachers College, Columbia University. Contributions to Education, No. 531. $1.50.

The Education of Young Children in England. By *Jewell Lochhead, Ph. D.* Bureau of Publications, Teachers College, Columbia University. Contributions to Education, No. 521. $2.25.

Training in Objective Educational Measurements for Elementary School Teachers. By *Maxwell G. Park, Ph. D.* Bureau of Publications, Teachers College, Columbia University. Contributions to Education, No. 520. $1.50.

The Development of a State's Minimum Educational Program. By *Arthur W. Schmidt, Ph. D.* Bureau of Publications, Teachers College, Columbia University. Contributions to Education, No. 508. $1.50.

Health Studies. By *F. M. Gregg*, Department of Psychology and Education, Nebraska Wesleyan University, and *Hugh Grant Rowell, M. D.*, Assistant Professor of Health Education, Teachers College, Columbia University. Two volumes. Bound in sturdite. Illustrated. Home and Community vi. 258 pp. 76 cents. Personal Health, vi. 314 pp. 84 cents. Teachers' Manual for each. The World Book Company.

Providence Inventory Tests in Music. By *Richard D. Allen*, Ph.D., *Walter H. Butterfield*, Mus. D., and *Marguerite Tully*, A.M. Form A, Manual of Directions and Class Record. The World Book Company.

Margaret McMillan: Prophet and Pioneer. By *Albert Mansbridge*, C. H., Hon. M. A. (Oxon), Hon. LL. D. (Cambridge, Manchester, and Pittsburg). 1932. J. M. Dent & Sons, Ltd., cloth, 178 pp., 6 shillings, net.

Sally and Billy in Autumn. By *Marjorie Hardy.* Illustrated, paper, 48 pp., 20 cents. Wheeler Publishing Company.

How the Present Came From the Past. Revised edition. Book I. By *Margaret Elizabeth Wells*, Ph.D., Director of the Riverside School, New York. Cloth, 243 pp., 80 cents. The Macmillan Co.

The Ethics of War. By *Rev. Cyprian Emanuel*, O. F. M., and *The Committee on Ethics*. 1932. The Catholic Association for International Peace, paper 10 cents.

Contributions to Education Series, published by the Bureau of Publications, Teachers College, Columbia University. Six volumes as follows: The Curriculum of the Special Class. By *William B. Featherstone*, Ph. D. Public Secondary Education for Negroes in North Carolina. By *Hollis M. Long*, Ph.D. The Improvement of College Worship. By *Paul N. Elbin*, Ph.D. A State Minimum Teachers' Salary Schedule. By *Paul R. Spencer*, Ph.D. Length of Service of Pennsylvania High School Teachers. By *Lyman H. Van Houten*, Ph.D. The Administration of Student Personnel Services in Teacher-Training Institutions in the United States. By *Marion Ernest Townsend*, Ph.D.

Food and Your Body, Talks With Children. By *Mary Pfaffmann*, Health Educator, the Boston Dispensary, and *Frances Stern*, Chief of Food Clinic, the Boston Dispensary. M. Barrows & Company, cloth, 170 pp., $2.00.

Directing Learning in the Elementary School. By *Walter S. Monroe*, Professor of Education and Director, Bureau of Educational Research, University of Illinois, and *Ruth Streitz*, Professor of Education, University of Cincinnati. 1932. Doubleday Doran Company, 480 pp., $2.50.

A Practical Teacher of Public Speaking. By *Herald M. Doxsee*, Teacher of English and Debate Coach, Cleveland High School, St. Louis, Mo. The Bruce Publishing Company, 248 pp., cloth, $1.32.

The History of the Municipal University in the United States. By *R. H. Eckelberry*, Asst. Professor of History of Education, Ohio State University. Published by Office of Education, United States Department of the Interior, Bulletin 1932, No. 2, 213 pp., paper.

An Introduction to Greek History, Antiquities and Literature. By *A. Petrie*, M.A. 1932. 160 pp., cloth, illustrated. Oxford University Press, 95 cents.

Debate Outlines on Public Questions, 1932. By *Oliver Clinton Carpenter*, LL.B., Member of the Bar of the United States Supreme Court and of the Bars of the State of New York and the District of Columbia. Seventh revised edition, 1932. Minton, Balch & Co., 329 pp., cloth, $2.50.

The following are from Bureau of Publications, Teachers College, Columbia University:

Content of Student-Teaching Course, Designed for the Training of Secondary Teachers in State Teachers College. By *John Garland Flowers*, Ph.D. Cloth, $1.50.

Some Effects of Incentives. A Study of Individual Difference in Rivalry. By *Joseph Zubin*, Ph.D. Cloth, $1.50.

Relations of Religious Training and Life Patterns to the Adult Religious Life. By *Luther Ellis Woodward*, Ph.D. Cloth, $1.50.

A Study of the Effects of the Teacher Tenure Law in New Jersey. By *Raleigh W. Holmstedt*, Ph.D. Cloth, $1.50.

Admission of Students as Candidates for Master's Degree. By *Joseph Raymond MacNeel*, Ph.D. Cloth, $1.50.

Educational Opportunities Provided for Postgraduate Students in Public High School. By *Einar W. Jacobsen*, Ph.D. Cloth, $1.50.

The Operation and Effects of a Single Salary Schedule. By *Rosewell Page Bowles*, Ph.D. Cloth, $1.50.

American Lands and Peoples. By *J. Russell Smith, Ph. D., Sc. D.*, Professor of Economic Geography, Columbia University. 394 pp., illustrated, cloth. John C. Winston Company, 1932.

An Orientation in Educational Psychology. By *Donald W. Miller, Ed.D.* 234 pp., cloth. Richard G. Badger, Publisher. $2.00.

The Sex Technique in Marriage. By *Isabel Emslie Hutton*, M.D., with a Foreword by Ira S. Wile, M.D. 1932. 160 pp. Emerson Books, Inc. $2.00.

The Dark Places of Education. By *Dr. Willi Schobaus*, Director of the Training College at Kreuzlinger, Switzerland. With a Collection of Seventy-Eight Reports of School Experiences. Translated by *Mary Chadwick*. 351 pp., cloth. $2.75. Henry Holt and Company.

The Great Critics. An Anthology of Literary Criticism. Compiled and Edited by *James Harry Smith* and *Edd Winfield Parks*, Department of English, Vanderbilt University. W. W. Norton & Company, Inc. 1932. 564 pp., cloth. $4.75.

Achievement in the Junior High School. By *Bancroft Beatley*, Graduate School of Education, Harvard University. 1932. Harvard University Press, 92 pp., cloth $2.00.

Gifts to the Public Schools. By *William R. Odell*, Ph.D., Associate in Commercial Education, Teachers College, Columbia University. 1932. 133 pp., paper binding. Published by the author at 525 West 120th St., New York.

The Role of the Teacher in Personnel Work. By *Ruth Strang*, Assistant Professor of Education, Teachers College, Columbia University. 1932. 332 pp., cloth. Bureau of Publications, Teachers College, Columbia University.

Training and Growth in the Development of Children. A Study of the Relative Influence of Learning and Maturation. By *Arthur T. Jersild*, Ph.D., Assistant Professor of Education and Research Associate, Child Development Institute, Teachers College, Columbia University. 1932. 73 pp., cloth. Bureau of Publications, Teachers College, Columbia University.

A Modern French Course for Beginners. By *A. C. Clark*, M.A., I. O. Officier de l'Instruction Publique, Head of the School of Modern Languages, The Polytechnic, Regent Street, London. Second edition. The Peter Reilly Company, 139 pp., $1.25, cloth.

A Modern French Course, Part II. By *A. C. Clark*, M.A., I. O. The Peter Reilly Company, 181 pp., cloth.

A Modern Commercial French Reader. By *A. C. Clark*, M.A., I. O. and H. Checkley, B.A. (Hons.), The Polytechnic Secondary School for Boys, London. The Peter Reilly Company, 211 pp., $1.35, cloth.

A Modern Text-Book of Commercial French. By *A. C. Clark*, M.A., I. O. and H. Checkley, B.A. (Hons.). The Peter Reilly Company, 97 pp., $1.00, cloth.

Modern Business Geography. (Revised edition.) By *Ellsworth Huntington*, Research Associate in Geography, Yale University, and *Sumner W. Cushing*, Late Head of the Department of Geography in the State Normal School, Salem, Massachusetts. With an Introduction by *Frank M. McMurry*, Teachers College, Columbia University. 325 pp., illustrated, cloth, 1932. The World Book Company.

Western Youth Meets Eastern Culture. A Study in the Integration of Social Studies, English, and Art in the Junior High School. By *Frances G. Sweeney*, Teacher of Social Studies, *Emily Fanning Barry*, Teacher of English, and *Alice E. Schoelkopf*, Teacher of Art. 1932. 335 pp., illustrated, cloth. Bureau of Publications, Teachers College, Columbia University.